

# DEVELOPMENT OF GUJARAT

-People's Perceptions



Editors  
Sam Pitroda  
R. J. Mody

SARDAR PATEL INSTITUTE OF ECONOMIC & SOCIAL RESEARCH  
AHMEDABAD



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1997

*The cost of publication has been met from the interest income  
from the generous donation received from ICICI.*

*First Edition : 1000 copies*

*Price : Rs.300/-*

*Printed in India*

*Published by*

**R.J.Mody, Director,**

*Sardar Patel Institute of Economic & Social Research,  
Ahmedabad-380 054.*

*Printed by*

**R.J.Mody, Director,**

*Sardar Patel Institute of Economic & Social Research, Ahmedabad*

*at*

**Dhruv Printers,**

*305, OM Shree Gokul Complex,  
Nr. Sardar Patel Statue, Ahmedabad-380 014.*

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*Published in 1997*

## **Acknowledgment**

We are thankful to the Hon. Chief Minister, Shri Shankersinh Vaghela, Shri Mahendra Desai, Advisor to the Chief Minister, Shri S.K. Shelat, former Chief Secretary, Shri L.N.S. Mukundan, Chief Secretary and Shri G.L. Bhagat, Planning Secretary for sponsoring project and encouraging us to complete it within a short time.

We are thankful to all the members of the Research Team, Editorial consultants and members of the Advisory Committee. This report is really a result of the collaborative effort of the members listed elsewhere in this report.

We must appreciate spontaneous and enthusiastic response of all the participants of the District level meetings and all the knowledgeable people who were interviewed as well as the members of the academic fraternity who interviewed them.

Thanks are due to Shri Hartej Singh for computerising the draft report of the working groups in a standardised format. Research and secretarial assistance provided by Sarvashri Ashwin Raval, K.P.Satheesan, M.C. Madhavan and K.Heistrene must be appreciated.

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## Preface

There is a general consensus that the planning process should be people oriented. Therefore, involvement of people in the formulation of plans and public participation in the implementation is critically important. Secondly, the planning process should be beyond politics. There is a need for consensus on critical issues concerning the controversial issues so that the welfare of the people is guarded unitedly by all the political groups. Thirdly, the plan must be a living document. It should not be an exercise undertaken only once in five years. There is a need for continuous monitoring, evaluation and feedback to improve the planned document year after year.

With these objectives in mind, the present planning exercise was undertaken. Members of the research teams organised district level meetings which were attended by experts, representatives of non-governmental organisations and financial institutions and many knowledgeable citizens. In addition to the district level meeting, a large number of knowledgeable persons were personally interviewed and their comments have been recorded. The selection of the interviewees has been random. The objective of this exercise is to capture perceptions of people. Until now plans have been prepared by experts and government officers. This is the first time people from all parts of the state have been involved in a dialogue on planning for the development of Gujarat.

This report consists of the following components apart from the introduction which summarises the main findings. On each of the fifteen topics, there is a

- (1) report of the expert panel
- (2) report of district level meeting
- (3) report of the personal interviews of knowledgeable persons from different parts of Gujarat.

We are grateful to the Government of Gujarat for sponsoring the project. We are thankful to all the members of research teams, editorial consultants and members of the Advisory Committee. This report is really a result of the collaborative effort of the members listed elsewhere in this report. We appreciate spontaneous and enthusiastic response of all the participants of the District level meetings and all the knowledgeable people who were interviewed as well as the members of the academic fraternity who interviewed them. Research and secretarial assistance provided by Sarvashri Ashwin Raval, K. P. Satheesan, M. C. Madhavan and K. Heistrene must be appreciated.

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## **Introduction**

Gujarat has less than 5 per cent of India's population, but contributes 11 per cent to its national output. The rate of growth of state domestic product was 2.7 per cent during 1960-1980, but it increased to about 5 per cent during the 1980's. Gujarat has 27.4 per cent share of its total domestic product originating in the primary sector as compared to 32.9 per cent in India as a whole. Major food crops are bajra, wheat, rice, jowar, pulses. Major cash crops are cotton, groundnut and other oil seeds. Gujarat has a diversified industrial basis consisting of textiles, chemicals, fertilizer, pharmaceuticals, petroleum products, edible oils, dairy products, etc.

Water scarcity is a severe problem in north Gujarat and some parts of Saurashtra. Indiscriminate drilling of tube well has lead to increased fluoride (causing fluorosis) content in the water in Mehsana and salinity in coastal areas of Saurashtra. Sardar Sarovar project can partly ease this problem. The adult literacy rates are 73 per cent and 49 per cent for males and females respectively. Literacy and primary education should be on top of the agenda for action followed job oriented vocational training for the youth. Infant mortality rate is 64 per 1000 which lower than the national average of 81 per 1000. Industrial pollution is a major health hazard. Poverty is largely predominant among scheduled castes and tribals which consist of about 23 per cent of the population. Schemes concerning health, education and poverty alleviation should involve people's participation and there should be public accountability and transparency of expenditure.

Gujarat has a potential to increase the rate of growth upto 7 per cent given the entrepreneurial capability of the people, industrial peace and resource endowment. A large inflow of investment is required on a continuing basis. This is possible by providing infrastructural facilities like power, roads, communication, etc. and positive development-oriented helpful approach of the government machinery particularly at lower levels. High economic growth comparable to newly industrialised Asian countries like South Korea, Taiwan or Singapore can be achieved by implementing economic reforms. This requires dismantling licence - control raj, and reducing budget deficits by making public sector enterprises more efficient and reducing subsidies to creamy layers of the beneficiaries (rich farmers, students, passengers, urban well-to-do consumers, etc.) The task is not easy because these beneficiaries form a vocal organised class. The most important part of the reform is to change the mind set of the people, politicians and the government servants. People have to start thinking that the government cannot be expected to solve all the problems. Politicians have to start thinking that problems cannot be solved only by orders and controls. Government babus have to start thinking that they are not masters but the servants of the people.

The following section summarises the planning issues and policy actions required in fifteen areas identified for development of Gujarat

## **1. POPULATION**

Population forms an important component of nation's wealth when it is perceived as human capital. This requires to employ huge resources to look after their health. It is imperative that individual health needs are to be met as far as possible. High quality health services have to be made easily available which calls for improvement in state health care infrastructure. The immediate attention has to be concentrated to reduce infant mortality rate (IMR). This would involve strictly implementing population control measures and monitoring them. It has to be targeted to the population growth rate of 1.2% to 1.5% by 2002.

As an intensive measure to check the growth rate of population and particularly that of poor population, extensive population education programme in terms of health and literacy, quality of population has to be carried out. There is a stupendous task of improving human resources development with HRD department of the central government.

There is a need to spread awareness among the masses for adopting new methods and techniques of population control. Rapid population growth has led to increase the social cost to look after the growing numbers. Quality of life has gone down. Qualitative and quantitative steps on population growth are urgently required. It is highly acclaimed that no change in the existing living pattern is possible except through implementing and monitoring effective health care programmes. Besides, efficient manpower planning is needed to check the population growth.

Gujarat population may cross eight crore mark by 2025. It has been increasing at the rate of 1.94% per annum. It has reached a level of 4.65 crore at present. The couple protection rate which is 65 at present, has to be raised to 90-95 as early as possible to mitigate this problem. It has been observed that gender injustice is prevalent more in rural areas. This has to be gradually removed through enlightening female population. Their acceptance to female literacy programme may certainly help lessen this gender injustice.

The problems are multifarious. There is a high birth rate. Infant mortality rate (IMR) is significantly high. The village level health committees (VHC-s) are inefficient. It has been observed that there is improper devolution of resources and funds. The female literacy rate in rural Gujarat is very low. Besides, primary health centres (PHC-s) are devoid of sufficient number of doctors and paramedical staff.

There is lack of information regarding health care and educational activities undertaken by the state government. The family planning message does not reach adequately to the uneducated people in rural areas. The couple protection rate has been very low at present. Immunization rate has to be increased to 100%. 35-40% of couples in the reproductive age group belonging to poor, illiterate households are yet not covered under the family welfare programme (FWP).

There are poverty, unemployment and disease amidst growth and development in the state. Child vaccination is not properly looked after in rural areas. No proper records of vaccination children and women in reproductive age group are maintained. Poor health and high disease incidences are more commonly observed among the rural population of the state. Early female marriage age increases risks to mother for the simple reason of prevailing ignorance about

using methods of preventing conception. Health care services provided by PHC-s in the rural areas are insufficient.

Following recommendations have been made to help solve some of these problems.

Deliveries should take place in hospitals, PHC-s or sub-centres (if properly equipped). Contraception acceptance has to be increased. Immunization services to children against communicable diseases should be easily available. PHC-s should increase and expand transport facilities for various health care activities. There should be greater involvement of non-governmental organizations (NGO-s) for devolution of resources and funds at grass root level.

Primary women education as a minimum programme should be emphasised. Besides, adult literacy programme emphasising particularly adult education to mothers has to be strictly implemented. There has to be increase in budgetary provision for FWP and child health care programmes. The eligible couples should be approached at right time and enthruse them towards following small family size concept and adopting proper child health care measures. Incentives for maintaining small family size - one child family norm should be provided.

Implementation must be strict and proper for serving rural areas after passing M.B.B.S examination. PHC-s should be properly staffed. There should be an easy access to PHC-s and sub-centres. Child health care programmes should be on top priority agenda. Regular vaccination programmes should be in rural areas. Status of women should be enhanced for effective implementation of FWP. Family planning has to be considered as a mass movement. For this, intensive advertisement for FWP, small family size, and child and mother health care has to be made through all media.

The health committee for each village should be supported by experts in the field, doctors, NGO-s, social workers, religious heads etc. These committees have to monitor the on-going health care programmes in the villages.

**(A) Short term: (2-3 years)**

Following short term action plans is suggested:

Improvement in performance of immunization to mother and child, reduction in the infant mortality rate, strengthening follow up services to mother and child, improvement in quality of health care services, introduction of preventive checks regarding child care services, monitoring comprehensive immunization programmes, reaching all the eligible couples for family welfare programmes (FWP) using all the available traditional and non-traditional media, information spread among the target population in rural areas, filling up PHC staff vacancies and proper maintenance of the existing health care service facilities.

**(B) Medium term: (5 years)**

Following medium term action plans is suggested:

Changes in the social set up to be made through education and media usage, personnels of the PHC-s to be exposed to training at regular interval, creating awareness for health care facilities, pooling resources for efficient management of health care services, building quarters for PHC-s' staff, providing better

infrastructural facilities, developing innovative literature for mass awareness for health care and related services provided by PHCs, easy availability of ante-natal facilities, implementation of food and nutrition programme, abortion for unwanted pregnancies under medical check ups, building incentive schemes, popularising small family norm and female education as social value.

**(C) Long term: (10 years)**

Following long term action plan is suggested:

Establishing information channels at all levels for planning, implementation, monitoring and evaluation of health-care and related services, achieving 100% literacy rate in rural areas, implementing mass education programme, stabilization of population growth, attaining zero growth rate by making contraception adoption level above 60%, expanding PHCs into hospitals where population is above 20,000, spreading population and sex education, improving sanitation and occupational health, expanding health care services for enhancing quality of life and developing local motivating leadership in each village along with village health committee.

**Resources needed**

Resources are enough. There is urgent need for tapping and efficient utilization. For this, NGOs should be involved. Resources needed for staffing and bridging other critical gaps to enhance quality services and to offer an essential reproductive health package. The state budget has, therefore, to be upwardly revised at the rate of 12-15% per annum.

Adoption of 25-50 villages by big companies / corporate organisations has to be considered a viable proposition for an effective spread of health care related services.

## **2. LITERACY AND EDUCATION**

- (a) To increase adult literacy levels (both male and female) and achieve 100% literacy among the young in urban, rural and tribal areas;
- (b) To make primary education compulsory and universal, and improve its quality substantially;
- (c) To improve quality of teaching and training of teachers at all levels - primary, secondary and college - so as to bring the standards on par with those prevailing in other advanced countries.

Educational scenario in Gujarat is dismal. Adult illiteracy both male and female, high dropout rate in primary schools, poor standards of education at all levels - primary, secondary and college, apathy of teachers, government and society at large towards the implications of failures of plans and programmes in this area during the five decades since independence, overall despair and despondency regarding the prospects of implementing a meaningful action programme, inadequacy of financial and manpower resources especially for improving standards of primary education - these and similar other problems stare in the face of any one attempting to make a fresh bid to grasp, assess and then prepare even an outline of an approach to tackle these complex issues. Identification of problems, assessing their gravity and exploring the means to tackle them are

urgently required. The involvement of cross-section of society and directly eliciting information/responses/suggestions from teachers, social workers, administrators, politicians, NGOs, etc. both in urban and rural areas through personal interviews and discussions have been of great value in identifying problems and finding ways to tackle them.

The approach to education at all levels has to be consistent with the declared policy of liberalization in all areas, while at the same time protecting and promoting the interests of the weaker sections of society - SCS, STS, OBCs, etc. Resources - financial, physical and infrastructural may be mobilized to some extent from sources other than the coffers of the state. Voluntary agencies, industry and trade and private Trusts have to play a pivotal role in improving as quickly as possible the abysmal state of affairs in the field of education; otherwise Gujarat may have achieved a high degree of industrialization by the turn of the century but it will not rank high in terms of quality of education and trained/skilled manpower among the states in India.

- (a) **Literacy** : Active and vigorous involvement of NGOs, voluntary movements (e.g. Swadhyay Pariwar of Dada Pandurang Athavale) and some progressive religious organizations in the Total Literacy Campaign to be solicited by the government and then left to them.
- (b) **Primary Education** : Recruitment of trained, competent and devoted teachers is a prerequisite. The work of those already in employment has to be supervised monitored and directed to achieve the goal of quality primary education. Those not doing their work efficiently and diligently have to face proceedings and accept demotion/dismissal. All teaching aids and infrastructural facilities like class-rooms, black boards and audio-visuals wherever possible have to be supplied. The salary structure needs to be revised and placed at least on par with the first entrants (e.g. clerk or assistant) in government services. Private Trusts should be encouraged to meet all expenses on revenue and capital accounts. Text books should be simplified and location-specific. A higher percentage of budgetary allocation for education should be devoted to primary education. Dropout rates ought to be reduced by various incentives to students and teachers.
- (c) **Secondary and Higher Secondary education**: Teachers' role in secondary and higher secondary education has been marginalised. Teachers devote more of their energy and time to coaching privately outside the schools. This is a serious matter and needs to be addressed. Accountability has to be established. For this, assessment of teachers' class-room work and their contribution to the overall development of their pupils should precede their promotion/increments. Principals of schools should be empowered and entrusted with responsibilities. They should be held responsible for lapses if any.
- (d) **Higher Education** : The University Grants Commission is the Supervisory and Regulatory Body for higher education in India but its role in practice is confined to disbursal of grants only. The State Government, therefore, has to step in and prepare a master plan to reduce malpractices in admissions, examinations, selection of teachers and grants etc. The syllabi for various subjects for undergraduate and post-graduate degrees in most universities is almost decades old. In fact in some subjects contents are diluted. Updating syllabi, making teachers and principals accountable and moving



gradually towards higher education as the demotion of private educational Trusts and registered societies should be the guiding principles of the programmes for improvement in higher education.

### **3. ENVIRONMENT AND AFFORESTATION**

#### **PROBLEM**

The rapid and haphazard industrialization, particularly concentration on chemical industries in Gujarat, have resulted in deterioration of air and water quality in many urban centres. Development from above has increasingly turned "Common-property resources with well defined rights and community traditions" into "open access resources with no roles." In such a situation poor grab whatever they can. This has resulted in degradation of forest resources. Inappropriate management and pricing policies have led to waste of energy and water resources. In Saurashtra over-exploitation of sub-surface water has resulted in salinity-ingress in coastal areas; the same phenomenon in north-Gujarat and parts of Saurashtra is leading to falling water table and deterioration of water quality. Excessive dependence on canal irrigation in South and Central Gujarat has raised soil salinity through water logging. Absence of pollution control and waste disposal practices by industry have done lasting damage to air and water quality. The issue is not trade-off between environment and growth but how to achieve sustainable development.

#### **POLICY, PLANNING AND ACTION PROGRAMME**

- 1 Develop a decentralised environment resource accounting system in terms of availability and use, through involvement of layers of local self-government and NGOs.
- 2 Evolve, if need be in consultation with the Central Government, appropriate pricing policies for land, water, and energy (conventional and non-conventional) resources in a way that wasteful use is avoided. Adopt policies such that 'polluter pays'. Industries, NGOs and local bodies should join hands in environment preservation and regeneration.
- 3 Sectoral plans should have as a part an environment component.
- 4 Polluting industries should be compelled/induced to have effluent treatment plants. Areas which have concentration of such units, common effluent treatment plants could be set up with the help of government and industrial associations.
- 5 Pollution Control Act should be enforced strictly. Pollution Control Board should be given enough autonomy and teeth to act decisively.
- 6 Make industry to adopt devices for water and waste recycling. Recycled waste can be a valuable source of fuel. Use both carrot and stick, as the need be.
- 7 Use appropriate energy pricing to encourage use of non-conventional sources of energy Solar, wind, bio-gas) which are also environment friendly.

#### **AFFORESTATION**

- (a) The government bureaucracy that is charged with implementation, it is argued, operates in a decidedly non-participatory and non-consultative fashion. There is a need for flexible and adaptive process to successfully

## **LONG TERM ACTION PLAN**

- 1 A comprehensive Nutrition Policy should be devised and implemented containing real and implementable programmes of child health and nutrition. District should be made an operational unit.
- 2 The present focus of child health education and nutrition needs to be refocused from orienting only towards diagnosis and treatment of the diseases to all aspects of health, making people aware of health and positive to maintain it.
- 3 Vision beyond physical health and nutrition of children needs to be extended to achieve bigger goals like socialization, culturalisation and humanization of children to realize their full potential as citizens of state in future.

## **8. INFRASTRUCTURE**

Gujarat is a major Industrial State of India in terms of investments, industrial growth and diversity. It could even be considered the leader. The spatial spread of industrialisation beyond the well known "Industrial Corridor" has also been remarkable in recent years. In view of the new economic policy and the professed path of liberalisation, this industrial base has enormous potential for growth, both in economic as well as technological terms.

The availability of adequate infrastructure is a necessary pre-condition of this anticipated industrial and economic growth. The role of infrastructure is important not only in terms of facilitating the existing and anticipated investment but also to ensure a steady flow of future investments.

Of the several areas that constitute the Infrastructure sector, the logical choice as well as consensus for the highest priority areas would appear to be Power, Roads and Transportation, and Water.

### **POWER**

#### **Issues**

The foremost concern in this sub-sector is the anticipated deficit in the near future as a result of the rapidly increasing demand for power. This demand growing at the present rate, will exceed capacities of the current installed base plus ongoing projects, even as early as the turn of the century.

The above problem is further complicated by the restricted availability of coal as a fuel. This and other factors like wastage in consumption and distribution as well as sub-optimal production efficiencies may further increase the demand-supply gap.

There is a critical need for a perspective plan for the power sub-sector, which is consistent with other sectors of the economy and also supported by energy economics.

The area of new and renewable energy is not been explored in a serious and realistic manner.

#### **Strategies**

The dominating strategy which can take care of the major part of the increased

future demand for power would be to set up large scale power plants. This would be preferably in the private sector and could use imported coal or LNG as fuel, given the limited availability of Lignite, Naphata or onshore gas. The power produced by these plants could be supplemented by a variety of ways including the development of non-conventional energy. Such sources could range from tidal with, solar energy, wind energy, bio-gas to the production of electricity from urban waste. In this part of the country there is a significant potential of generating electricity from solar and wind energy along the long coastline and the western arid region. The government needs to make a serious and realistic investment in this area.

Proper demand management measures are required which could be in the form of power saving, rationalisation of use and controlling the theft of power. Some of the measures could be use of appropriate devices in high power intensive industries like cement and petrochemicals; controlled use of borewells; decentralisation of power distribution and strict monitoring of all groups of consumers based on energy audits.

On the supply side, modernization programmes are needed to improve plant availability and plant load factors. Also, appropriate technology should be adopted to cut down distribution losses.

Investment in the power sub-sector must be planned after taking into consideration the development of all sectors that are power intensive. The State's perspective plan should be backed up by the real energy economics of generating power through alternate sources in the backdrop of the development of other sectors.

## **ROADS AND TRANSPORTATION**

### **Issues**

The major issue in this sub-sector is inadequate deployment of funds for road development and its declining share in the total plan.

Maintenance of existing roads is also a neglected aspect. There is a regional imbalance in the spending for roads, a problem which is complicated by the misuse of disbursed funds.

Management of traffic and the types and conditions of vehicles available for transportation is a serious problem particularly in the link roads connecting to urban centres.

### **Strategies**

Private sector BOT/BOOT projects should be encouraged and their implementation speeded up.

Increasing state expenditure on roads as well as augmenting the public sector transport fleet are urgently required.

Rural roads, arterial roads and major district roads which provide links to the urban centres need to be upgraded.

A master plan is required for regionally balanced road development to include regular funds for upgradation of technology. World Bank projects may be solicited in this respect.

Proper checking of office records and monitoring of sanctioned projects is required to ensure proper use of disbursed funds.

The state needs to inculcate a traffic sense through conjunctive use of an efficient traffic management system and proper mass education programmes.

## **WATER**

### **Issues**

Water is perhaps the scarcest resource in the whole of Gujarat. However, this is more so in North Gujarat, Saurashtra and Kutch where even drinking water is at a premium. In the face of this, irrational use of water is the most serious problem on the demand side.

On the supply side, the problems range from slow implementation of water based projects to inadequate investment in water harvesting.

### **Strategies**

Large multipurpose projects like the SSP must be implemented without delay.

The Government needs to examine the water resources of every region/district in Gujarat, to establish norms giving priorities to different uses of water (drinking, agriculture, industry, others). Water delivery systems should strictly conform to the established norms/ priorities.

Ground water recharging is not only a requirement in the short term but is an essentiality in the long term. This can be done by harvesting and percolation and also by the control of groundwater withdrawal through borewells.

Use of water saving technologies like drip and sprinkler system in agriculture is a must. Projects like urban water recycling, treatment of industrial effluence need to be encouraged.

## **OTHER ISSUES**

The State needs to establish more research institutions dealing with infrastructure.

Once major canal systems are available, inland waterways could be exploited for movement of cargo.

Development of existing ports of Gujarat particularly Umbergaon is essential to reduce the dependence on ports like Mumbai. Port expansion projects could also be given to the private sector.

## **9. SUSTAINABLE URBAN DEVELOPMENT**

### **OBJECTIVES**

Sustainable urban development presupposes integrated development of small and medium towns and cities. Among other objectives of this programme, the prioritised ones include housing development for low income group (LIG) families, renovation of old buildings, long-term planned urban development, computerisation of property records, city surveys and village records, employment schemes, initiating administrative change in self-government, clean water and solid waste management, adequate essential services to urban

population, drainage and other urban infrastructural facilities, urban planning for maintaining quality of life of the resident population with respect to basic minimum facilities, formulating comprehensive workable urban development policy and devising related programmes, promoting greater participation of private sector NGO-s and community organisations, modernising urban development management with long term perspective, mobilising sufficient resources for strengthening urban services, avoiding unplanned urban development, improving conditions of urban slum dwellers, and channelising migration flow to help minimise population pressure.

## **BACKGROUND**

The existing urban scenario of the state is not so attractive. There is haphazard and uneven development of towns and cities. With the mounting population pressure, especially of floating population, there is growth of satellite and peripheral towns. To help minimise this problem various housing development and employment schemes have been launched and progress to a certain extent has been made. However, the foremost impression carried is that of haphazard and uneven housing. The growth of the urban centres is partly attributed to migration flow of population from rural to urban areas as well as other parts of the country. It has been observed that there has been significant change in growth pattern in size and class of cities / towns. This has been reflected in the adversely affected quality of life. Another development has taken place in the form of urban diffusion through industrialization in backward areas on the fringe of major urban areas. This has necessitated administrative change supportive to urban growth. This change has gradually set in.

The pace of urbanisation in the state has been relatively fast. Problems such as inadequate water supply, poor sanitation, environment degradation, traffic congestion, social tensions etc. have come to surface at a number of urban locations. The unplanned growth of urban areas has allowed to grow slums on the pattern of huge cluster in and around the important locations spreading urban slum poverty. The defective land-use pattern has led to mismatching of urban land-housing policy.

## **PROBLEMS**

There are varied problems created and nurtured by the unplanned urbanisation in the state. The common urban scene of emergence of unorganised, unauthorised residential, commercial complexes is an immediate outcome of lack of well defined town planning schemes. Old buildings are neglected lacking renovation and maintenance.

Concentration of population at few pockets / locations has resulted in pressure on urban amenities. The defective urban land-use pattern has led to conversion of fertile land to non-agricultural use encouraging industrialisation and residential housing development. The unplanned rapid urbanisation has been due to lack of integrated development of peripheral small and medium towns.

Employment and settlement problems have become more acute. Other problems such as pollution, disregard for traffic regulation, insufficient resources for public health services have seriously affected quality of urban life.

There has been little participation of people in the town planning exercises. Rapid growth of urban slums has increased urban poverty.



Municipal corporations in the cities and municipalities at town level are suffering on two counts - insufficient resources in relation to the magnitude of services to be provided and less motivated staff for carrying out this responsibility.

Unauthorised, unplanned and unchecked construction works have been obstructing construction of new roads and widening of the existing ones.

It has been observed that difficulties are commonly arising due to improper maintenance of records in the city survey offices, gram / town panchayat offices, municipalities etc. This leads to loss of revenue.

HUDCO's residential housing construction works are going on very slow in correspondence to huge housing requirement. Besides, the poor quality works put LIG families to more difficulties.

Infrastructural development lags much behind urban population growth resulting into bottlenecks frequently experienced such as in transportation facilities, drinking water, drainage, sanitation etc. At the top of this the financial constraint is looming large for the adequate road development in urban areas.

### **RECOMMENDATIONS**

Following recommendations are made to help solve problems arising due to unplanned urbanisation.

Town planning schemes (TPS) should be strengthened prioritising low income group (LIG) housing schemes - one of the basic commitments on the part of the town planners and policy makers. However, this should not result into disturbing the urban skyline. Urban Art Commission has to be set up to define the urban skyline. The emphasis has to be on encouraging satellite and peripheral townships.

Industrial activities should not to be concentrated at a few urban locations which would induce the town / city planners to identify urbanisable area. This necessitates funds from Infrastructure Board to be partly diverted to urban development authorities of the concerned cities.

Industrial policy should attract industrialisation in small and medium size towns instead of focussing alone on backward districts for solving unemployment problem to some extent.

The pollution awareness education should form an integral part of the public awareness education incorporating traffic problems, congestions experienced on major junctions etc. Utilization of natural gas in industries has to be popularised for solving environmental problems in urban areas.

There is an ample scope for encouraging privatisation of urban management for improving administrative efficiency. The problem of urban man-power planning has to be at the core of effective urban development policy having long term perspective for urban development.

Urban development schemes should be monitored by citizen councils of the concerned cities. Urban services are to be expanded and deficiencies to be removed as far as possible. Eradication of urban poverty programmes have to be expanded and revamped. The slum clearance programme will be successful only by providing alternate accommodation at low cost. This necessitates framing of "New Township Policy." There should be financial and labour input from the beneficiaries also.

Local self government institutions have to be activated and made them accountable.

Permanent "Urban Commission" has to be set up for framing and monitoring urban land-housing policy. Citizens' groups taking active interests in the urban development programmes should be formed. Long term planning has, therefore, to be done for meeting future needs of roads, water supply, residential accommodation, electricity, transport, communication considering the rapidly increasing urban population.

Illegal construction works have to be discouraged entirely. There is an urgent need for decentralising certain business and industries to check the influx of migration of rural population to urban areas seeking job opportunities.

Rapid infrastructural development is the only solution to mitigating disorder of urban services. Road - railway bottlenecks have to be minimised on a priority basis. This requires widening of the roads and adding more railway tracks for which resources need to be augmented. More subsidised zones to be declared for reducing urban agglomeration.

## **ACTION PLAN**

### **(A) Short term: (2-3 years)**

Following short term action plans are suggested:

Preparation of vision 2000 Master Plan by experts in collaboration with urban development authorities of all cities and professional bodies of the state, preparation of comprehensive development plan for water supply, drainage, electricity and roads for urbanisable areas identified by 2001, slum clearance programme implementation, raising of resources for infrastructural development by additional taxation, introduce necessary changes in urban development policy, mobilising untapped civic resources for financing new development programmes, expanding HUDCO's LIG housing construction work, strengthening co-ordination between the centre and the state for gas, railway, road, natural gas linkages for urban infrastructural development and allocating sufficient financial assistance for road development.

### **(B) Medium term: (5 years)**

Following medium term action plans are suggested:

Allowing too big industries within 25 kms radius of urban cities and big towns, revamping urban development policy to suit modern needs, widening of roads, cleaning city areas, promoting health care and sanitation facilities for making environment friendly urban areas, fund raising through financial institutions like Gujarat Municipal Finance Board, IDBI for urban capital projects, setting up of "Permanent Urban Commission" to continually review urban development policy and programmes, preparing comprehensive urban development policy incorporating aspects of land use policy, housing policy, policy on new township, expanding communication and transport facilities viz: road widening, railway tracks adding, railway electrification etc.

### **(C) LONG TERM: (10 YEARS)**

Following long term action plans are suggested:

Preparing comprehensive traffic and transportation plans upto 2011 under guidance of State Planning Board, preparing long term perspective plan for cities, slum clearance on a priority basis with providing attractive alternate cost-effective accommodation, introducing modern management of towns and cities through effective urban land-housing policy, allocating more funds to local bodies through devising better formula for devolution of state budgetary resources, preparing long term plans for water supply, drainage system, storm water disposal, roads, electricity etc., developing marine transport such as harbour transport between Surat and Bhavnagar, developing places of Tourism spots involving and encouraging private sector through offering subsidies and declaring subsidies zones in various backward areas of the state.

### **RESOURCES NEEDED**

For financing above referred action plans additional resources are required for urban development and integrated development of nearby villages, towns / cities especially for roads, water supply and other critical infrastructure.

For mobilisation of these resources HUDCO, World Bank, Urban Development Ministry, Government of India, and other collaborative capital projects sponsoring developed countries are to be contacted.

State Government need to allocate more funds for financing urban development projects.

## **10. WOMEN AND EMPOWERMENT**

### **ABSTRACT**

Although the state is leading towards entering into 21st century by establishing successful global links, it has remained unsuccessful in bringing the women folk of the state in the mainstream of the developmental process. Women in general and rural women in particular face socio-economic injustice inspite of large number of welfare schemes and programmes are being implemented in the state. Problems viewed by the experts on the subject are first related with almost static socio-economic fabric of our society which lead to high women illiteracy rate, higher drop out rates of girls from primary education, lower participation in the decision making process in the family and society, lack of recognition of work, limited job opportunities, prevalence of dowry and other undesirable social customs. The second category of problems are related with the government efforts to raise status of women highlighted in the group discussion in terms of implementing various welfare programmes. Major components of these problems are lack of integrated approach to women employment programmes, limited NGOs network, missing spirit of social work especially among government officials, non-availability of women organizations in the rural areas, extensive government intervention in the functioning of social welfare activities and marginal impact of policies and programmes of women empowerment being enforced in the state.

## **Programmes, Policies and Action Plan**

The major recommendations to the problems in the sequence may be stated as:

1. To make the society aware of the need to raise status of women. The focus of policies should be on girl child. The drop out rates from primary education should be reduced in a given time frame. All educational facilities including providing modes of transport and means of communication should be made accessible.
2. To frame schemes for 100% enrollment and retention of girls in primary schools specifically in rural areas with the active involvement of NGOs.
3. To enforce target of 90% female literacy by the year 2011-12.
4. To organise more programmes for creating awareness in women regarding their social and economic status in the society. Various economic opportunities through agency like Mahila Arthik Vikas Nigam for generating income to support family income, for removing dogmatic beliefs and for encouraging political participation. Mahila mandals and NGOs should be encouraged and be provided necessary funds to conduct such programmes at the grass root level.
5. Free legal aid and counselling should be provided to the women in need.
6. More no. of child care centres should be set up.

There are large number of programmes and schemes being implemented by the State Government for empowerment of Women. It is recommended that to make these programmes more effective:

1. the Government should minimise its role. It should withdraw from directly providing welfare schemes. It should only monitor the functioning of NGOs.
2. Most of the government run schemes through social welfare department should be transferred to NGOs as 89% of the costs is of paying salaries to the staff of the department.
3. An apex body should be set up to monitor the schemes which are overlapping under different departments.
4. Government should provide legal aid and should enforce laws effectively.
5. Activities of Mahila Nigams need to be expanded. Efforts should be made to mobilise resources from global levels for women welfare programmes in the state.
6. The present women welfare programmes should be implemented and new programmes should be devised.
7. Topmost priority to women development programmes should be given and gender balance in decision making at all levels should be achieved.

### **Action Plans**

Some short term and long term action plan suggested are important at the decision making level. They are of following nature.

#### **Short term action plan**

1. Implement present programmes fully and seriously. Enhance people's participation in awareness building.
2. Review the property and inheritance laws.

3. Review the existing schemes of the government.
4. Prepare need based planning for women's welfare.
5. Create data bank for women development schemes.

#### **Long term action plan**

1. Gradual withdrawal of Government's participation except making and monitoring laws related to women.
2. Creating employment generating schemes from the point of view of developing entrepreneurial skill among women.
3. Monitoring the functioning of NGOs and other agencies to have an integrated approach of women development.
4. Bringing all women in the mainstream of economic development of state.

Development is a continuous process. The demarcation of short term and long term action plan however, can be made meaningful by a prudent use of resources made available for the women welfare programmes.

## **11. CULTURE & HERITAGE**

Gujarat is blessed with a varied culture and an invaluable heritage. Achieving harmony and cultural integration poses a tremendous challenge, particularly as the State's identity is linked to its classical, tribal, folk and archaeological heritage. Presently, continuous and appropriate government patronage and resource flow to the relevant pursuits has been inadequate. The fullest potential of the diverse fine/performing arts, literature and folk culture, together with heritage and scenic sites has not been realised in terms of global recognition. This has been on account of several deficiencies which need to be identified for possible remedies and medium and long term policy solutions. The states' tradition, habits, customs and other elements of its disparate culture and heritage needs to be preserved in its original form from the onslaught of modern industrial growth and western influences.

- \* Gujarat's cultural heritage encompasses ancient traditions/ customs/ folklore which requires to be preserved for posterity. Information dissemination to the next generation can be affected by inclusion of districtwise cultural references in school & university curricula, observance of local festivals in institutions and development of active information and cultural centres at the district levels. Museums, art galleries and auditoria have to be maintained and activated for holding cultural events. Traditional music forms can be preserved and popularised by recording audio cassettes etc. Individuals artists need to be thus encouraged and recognized.
- \* Traditional life style, dance, music, other performing arts, handicrafts culinary habits of Gujarat can be showcased through setting up of model villages/cultural centres to attract foreign and domestic tourism in urban areas and tourist centres. Kathiawar, Kutch, North and South Gujarat present a wide diversity of handicrafts. Such activities need to be rejuvenated and made profitable. Traditional craftsmen and artisans can be given incentive and support to facilitate their growth and for employment generation. NGOs can develop marketing conduits for products of village



industries in urban areas. Holding art melas, craft fairs etc. in cities can create demand for products and provide tremendous exposure to the traditional crafts.

- \* Institutional / Corporate / Individual participation needs to be encouraged for preserving and microfilming old documents and literary works after a detailed survey of private / public libraries. Efforts can also be initiated by them for preparing encyclopedia of culture, art, architecture of the state, as well as produce documentaries on the subjects by using modern audio visual aids. Art galleries, libraries, museums can also benefit from private patronage.
- \* Gujarat has a rich archaeological heritage. Conservation of sites and their preservation can be attained with direct participation of villagers, as well as NGOs and preparation of comprehensive plans for preservation. Additionally corporate sector can be encouraged to maintain the cultural heritage by granting suitable tax exemptions / tax credit and through appropriate legislative actions. To generate funds for maintenance of old temples, monuments, museums etc. entry fee of reasonable nature should be charged from visitors.
- \* For effective functioning, Lilt Kala, Music, Dance, Drama and Sahitya Academies need to be constituted with deserving / knowledgeable members, selected through a transparent procedure. Such bodies need to be granted greater autonomy and powers for decentralized decision making, with minimal governmental interference. Such bodies should also be subjected to periodic reviews in order to assess their objective contribution. With the aid of appropriate legislative measures, a suitable corpus of funds should be made available to ensure real and financial autonomy. Also, information and tourism departments need to be activated.
- \* Preserving the natural bio-diversity, forest and coastal wealth is equally important. Gujarat has valuable forest wealth and nearly 1600 km's. of coastline, dotted with natural harbours and beach resorts. These can be developed for revenue generating and financially viable tourism. Selected tourist resorts and circuits can be developed by providing basic infrastructure (e.g. transport, safe drinking water) through coordinated effort of public and private agencies. This would cause growth of regions and generate employment opportunities too. Related activities such as fishing, boating, trekking / mountaineering in different sites have to be given due attention for attracting foreign and domestic tourist.

Traditional / tribal arts, crafts, archival heritage and oral traditions that are threatened with extinctions need to be identified and brought to the fore. NGOs, Institutions and Individuals together with the electronic media can play a pivotal role in spread of information and generating awareness about cultural facets that are fast disappearing. Culture is an essential component of development and growth and is strongly related to the regional identity. The plan thrust has to be on protection, conservation, dissemination as well as promotion of all vistas of the States' culture and its rich heritage.

## 12. MODERNISATION OF THE GOVERNMENT

### Policy Planning and Action Programme

Suggestions regarding policy planning and actions can be classified into two categories.

- A. Policy and planning actions which do not involve significant investment and at the same time can be implemented without much extra efforts in the existing form of Government.
- B. Others which involve significant investment and their implementation may take some time during the process of transition.

A & B may also be viewed as short term and long term measures to modernize Government. The details are as under:

- A. In order to expedite the process of decision making and increasing the efficiency in the present administrative set up, it is suggested that,
  - 1. Intra and inter departmental co-ordination should be increased. This would help solving the connecting various departments. A Committee of officers of concerned departments may consider such cases in two meetings to arrive at decision.
  - 2. Indifferent attitude towards people needs to be checked. Administration personnel should be advised to listen to the grievances of people and try to be helpful and cooperative while dealing with them.
  - 3. Existing laws, rules and regulations concerning various sectors/aspects need to be minimised, simplified and clarified. They should be available to the people as and when they want (with changes incorporated therein).
  - 4. Administration should inform people about relevant policy changes that are announced by the Government. This would educate people with respect to the policy impact on their activity.
  - 5. In order to communicate with International Community and to make use of computers and other communication software, knowledge of written and spoken English is a must for this. The existing administrators should be encouraged to go for intensive course to learn English and Computers, at the same Government should also encourage administrators to learn Gujarati to effectively communicate with people of Gujarat.
  - 6. There is a need to improve work culture in Government by enforcing discipline, rationalising work accountability and providing incentives and dis-incentives.
  - 7. Interference of political personnel in administration to be minimised.
  - 8. Services of clean officers should be appreciated by the Government and Society.
  - 9. 'Parcel Administration' outside the legitimate administrative set-up, cultivated by the brokers and political middlemen should be discouraged.
- B. Suggestion and recommendations under this category are centred around improvement in communication and training, human resource development and innovations.
  - 1. Standard of teaching English in Schools/High Schools/Colleges will have to be improved drastically. Knowledge of English will make future

administrators access to international communication through the use of computers and communication software. This would help Government to improve the level of transparency. Administrators and citizens concerned can remain in touch with each other through inter net.

2. For the development of efficient communication among inter and intra departments all the taluka level offices should be equipped with modern means of technology with trained manpower who can operate and maintain. This would help in maintenance of law and order situation and information flow.
3. Government may think of getting rid of redundant personnel and those opting for 'Golden Hand Shake' by giving them monetary compensation.
4. In order to remove statusquoist tendency in administration, Government may think of introducing use of part time consultant or utilising the services of experts available in the State. Government may also consider utilising services of Non-Government Organisations to a higher extent in order to obtain field information and for other development activities. Administrative personnel may be trained in modern methods of decision taking and implementing.
5. Experience of Lok-Adalat may be extended to solve the dispute between Government and Citizen. Conventional approach of going to the Court may be discouraged. This would expedite the process of justice with less cost and time.
6. Law should be enforced to stop criminalization in political system. Under the present circumstances, criminals are elected and they are honoured with power and position. They do interfere and exert pressure in administration to fulfill their goals.

### **13. GLOBAL RESOURCES FOR GUJARAT**

#### **Problems**

Gujarat during the Ninth Plan has the capacity to achieve a growth rate of 7.5% p.a. vis a vis 7.0% p.a. for the country. This would roughly entail raising of Rs.1,10,000 crores at 1996-97 prices. Most of these resources, around 80 per cent, shall have to come from the non-governmental sources. In this process the global resources, in terms of finance, management and technology could make a significant contribution. The role of foreign investment, along with NRIs investment, specially those hailing from Gujarat, would be particularly significant in the areas physical infrastructure (ports, roads and power) and high-tech investment projects. The main issue is how to create conditions which enable flow of seizable global resources.

#### **Policy, Planning and Action Programme**

Number of useful ideas have emerged as a result of discussion meeting and interviews with grassroots level carriers of knowledge and experience. Ideas relating to policy, planning and action, take two forms :

- A Matters relating to organizational/institutional changes, generally not calling for significant financial commitment;
  - B Where the implementation of ideas requires sizable financial resources.
- (A) and (B) could also be viewed as short term and long term measures. But

categories suggested here an avoid need for demarcation of time into short, medium and long term.<sup>2</sup> We may give some details.

- A
- (i) The credit-deposit ratio of commercial banking sector in Gujarat is around 48 at present. If this is raised, additional resources could be mobilized. Requires healthy relations between the Government and the banking sector. Development corporations can help the private sector to prepare viable industrial projects.
  - (ii) Data bank should be established that collects detailed information about investment opportunities in Gujarat in terms of product, size and location. Such a bank should also collect information about global trends in industry and trade, and about global resources.
  - (iii) Strengthen business and industrial atmosphere
    - Encourage foreign banks to set up branches in Gujarat.
    - induce major industrialists to set up head-offices in Gujarat.
    - set-up International Trade Felicitation Centre.
  - (iv) Choose thrust areas/sector, reflecting Gujarat's actual/potential comparative advantage, after due consultation with industrial and business associations and experts in social and management sciences.
  - (v) Strengthen information and technology base of Gujarat economy :
    - Encourage organizations/industries/business associations to establish global networking,
    - Upgrade standards of some of the existing engineering college to IIT levels,
    - Facilitate in-house skill-formation in industry and service sectors.
  - (vi) Government should emerge as active facilitator with high degree of transparency.
- B
- (a) Develop ports to meeting international standards. Set up container depot covering coastline between Ahmedabad and Vapi. Develop Magdalla Port.
  - (b) Upgrade Ahmedabad International Air-port and increase international routing through Ahmedabad.
  - (c) Strengthen infrastructure services in terms of access and quality - Roads, Water, Power.
  - (d) Establish a network of quality-testing centres and industrial ports with global access.

#### 14. EMPLOYMENT

With the main objective of reducing backlog of unemployed and achieving full employment by the end of ninth plan a set of variety of direct and indirect policy measures leading to employment generation in the state have been recommended. Among the major policy measures include identification and investment in new high potential areas, upgradation of skill of workers, change in education system, decentralization of power and revamping the training institutions. The specific policy measures are as follows :

- (1) As the level and growth of output and commercialization of agriculture are the major determinates of labour absorption in rural areas, identification and

investment in new and potential areas in agriculture and allied activities will go a long way in employment generation in the long run. For this purpose, creation and modernization of marketing facilities, transport service, storage and processing facilities, etc. are the necessary pre-conditions and calls for sufficient investment. Some of the potential areas identified are forest based industries for hilly and forest areas, watershed, horticulture, dairying and diamond cutting. In coastal areas there is ample scope for employment generation in various fields such as coconut plantation and sopari tree, fishery, mineral and chemicals, salt, soda ash, caustic soda processing and preservation of marine products protein food etc.

- (2) Employment elasticity in existing areas may be increased by providing incentives for investment in more labour intensive and local resource based cottage and small scale industries. For this purpose need based and resource based planning in place of target based planning is essential.
- (3) For achieving regional balance in employment generation the state may be divided into homogeneous regions with respect to resource base; both natural and human. Region specific demand for skilled and unskilled workers they may be mapped to provide feedback for employment generation in each region.
- (4) Rehabilitation of local assets, reclamation of waste land and common property resources can be done with low investment and will substantially raise the employment and earnings for rural people.
- (5) In view of inability of formal sector to absorb entire labour force in wage employment efforts may be strengthened to promote self employment by providing facilities for training in modern and technical trades, timely release of legal and investment guidelines as well as financial assistance and coverage under insurance against risks on one hand and establishing better coordination among various government interventional schemes like IRDP, JRY etc. on the other.
- (6) A greater coordination between recruitment boards in organised industries and employment exchange offices be established so as to systematically absorb the workers from the office only.
- (7) For the efficient functioning of ITI's a consultative bureaucracy vis-a-vis present ITI Network is called for and the infrastructure for existing trades may be reviewed and necessary upgradation may be taken up for optimum utilization of existing network of ITI's. Syllabus of ITI's may be constantly revised in accordance with demand for labour in different sectors of the economy.
- (8) Decentralisation of planning may be recognised and strengthened by establishing district planning board in place of State level board.
- (9) In the light of new liberalization policies, NGO's may be involved in market functioning, identifying training and disbursing of loan. They must also be involved in district planning boards along with social workers, peoples representatives and government officials.
- (10) Lastly, as the long term policy the linkages between industry and academic institutions should be strengthened, technical and computer education in educational institutions may be introduced on large scale along with achieving universal literacy and abolishing child labour.



## 15. POVERTY ALLEVIATION

### 1 Objective of the Plan

Broad objective is first to identify the poor and then help them rise above the pre-determined poverty line.

### 2 Problems

There are several constraints in identifying and pin-pointing the persons below the poverty-line. The lists of persons below the line are incomplete, obsolete and unreliable. The problems of the poor in plain areas, tribal areas and desert areas are different and therefore, need different sets of measures to tackle them. There are problems relating to the special needs of poor women, creation of job opportunities, migrant labour, unremunerative cottage and small industries, lack of ownership of productive assets like land, cattle and other agricultural tools, unfair and extremely low wages, high inflation rates, lethargy and corruption in Governmental organisations and above all insufficient allocation of funds to the programmes for poverty alleviation.

### 3 Policy

The economic policy of liberalisation and privatisation initiated since 1991 coupled with measures to control fiscal deficits is bound to impinge on the release of fresh funds for social sectors. Therefore the emphasis has to shift from subsidies/cross subsidies or creation of government jobs to self-help skill-formation, training and direct assistance to target groups.

### 4 The Action Programme

- (a) Involvement of Voluntary Agencies/Gram Sabhas in identifying the poor is absolutely necessary. This would help update the records and make the poverty alleviation programmes relevant and meaningful.
- (b) The unit cost of certain Schemes fixed by the National Bank of Rural Development should be suitably revised upwards so as to take care of rise in prices of assets in rural areas.
- (c) Efforts should be made to derive schemes tailored to help poor women in rural areas. These include cooperative self-help.
- (d) Vocational Training Centres should be set up specially for the poor.
- (e) Incentives should be provided for setting up cottage industries using family labour.
- (f) Leakages from various Government schemes have to be plugged. The intermediaries have to be identified and their number reduced.
- (g) Gram Panchayats should be entrusted with the task of ensuring minimum wages to the poor working under various employment generation schemes.
- (h) Non-functional subsidies should be reduced considerably such that the benefits accrue only to the target groups.
- (i) The Forest Conservation Act (1980) needs to be amended so as to facilitate speedy development in tribal areas.
- (j) Common waste land in villages should be released and put to use for socially beneficial production.

# 1: POPULATION

## (i) EXPERTS

Prof. Pravin Visaria  
Dr. Ashok Desai

## (ii) RESOURCE PERSONS

Mr. R N Das, Municipal Commissioner.,  
Baroda  
Mrs. Nethra Shenoy, Secretary (Exp.) F.D.  
Mr. V.R.S. Cowlagi, ACS  
Mr. Ashok Koshi, ACS

## OBJECTIVE

To lower population growth rate to 1.6% by 2002 and 1.2% by 2016 and enable people to achieve better health and family life. To improve the quality of health services and make these services people-oriented.

## MACRO VIEW

Indicators	Past	Present	Target
Rate of growth	27.67 (1971-81)	21.19% (1981-91)	1.6 in 5 years. 1.2 in 20 years.
Population	3.4Cr. (81)	4.13 Cr.(91)	
Decadal Growth rate	28% (71-81)	21% (81-91)	12% (91-2001)
TFR	6.5 (60s)	3.2 (93)	2.1 in 10 yrs
Infant Mortality rate	120 (70s)	62 ('95)	40 in 5 years 15 in 15 years
Life Expectancy years	52	62	63.5 in 5  66 in 10 years 66 in 15 years
Fertility (see TFR above)			
Urbanisation	28%	36%	41%

## MICRO VIEW

CATEGORY	PROBLEM	SOLUTION
PREGNANCY	Poor Immunization	100% TTR Immunization
DELIVERY	30% by untrained	Trained personnel to handle  all the deliveries preferably in institutions
CHILD CARE	Inadequate care of new born and infants	Full health care (Immunization, Nutrition, ARI, ORT) Early registration of all ante-natal cases
NORMAL (FEMALE)	Reproductive Morbidity	Lower through health education, counseling stalls, clinical stalls
	Unmet family plg.	10% of currently married (women 15-45)

G.K. Jadav\*

## OBJECTIVES

1. Target free approach in population control
2. Effective participation at the rural level
3. Extensive population education programme at the village level

## BACKGROUND

No change in existing pattern is possible except through effective health and medical care programme

## PROBLEMS & RECOMMENDATIONS

1. Deficiency of doctors and paramedical staff in rural areas  
Recruitment of staff
2. Deficiency of vehicles for patients and extension programme  
Finance or help from NGOs
3. Information about education activities  
More Audio-visual shows for community education

## ACTION PLAN

### [i] Short Term (2-3 years)

1. Fill up staff vacancies immediately
2. Proper maintenance and expansion of primary health centres

### [ii] Medium Term (5 years)

1. PHC Staff Quarters and their repairing
2. Development of innovative literature for awareness programme

### [iii] Long Term (10 years)

1. Expansion of P.H.C. into hospital where population is more than 20,000

## RESOURCES NEEDED

State Health Ministry can prepare estimate of finance. NGOs can be associated in funding recurring expenses

### [1] POPULATION

The office of the District Health Officer at District Panchayat, Rajkot was visited to get original suggestions and feedbacks on population, health and medical care in rural areas.

- [1] What should be ways and means to reduce population growth in rural areas?
- [2] How to educate rural people in this regard?
- [3] What kind of patients are there in rural areas?

\* Chief District Health Office, DDO Office, Rajkot.

WHO certificate in Small Pox Eradication Programme, 26 Years service in Health Department.

- [4] How to make primary health centres effective for rural medical services?
- [5] What are your suggestions for extension education for population and health in the 9th five-year plan?

### **Responses**

- [1] In most of the rural families, more than six members are there. Particularly of landless farmers, casual workers and in the case of those below poverty line. They should be taught through audio-visual aids, (motion pictures etc.) about the socio-economic problems that arise due to more children. Extension education for population in rural areas can be effective through devoted workers. Association of NGOs in this activity is most welcome. Primary education for social awareness is necessary for poor people.
- [2] Rural people in Saurashtra can be educated through mass-media, and students upto high school be taught about sex, sanitation, health and children diseases. Free literature and films on diseases and effective family planning would be very useful devices.
- [3] Skin diseases and seasonal diseases like malaria, diarrhoea etc. among children and adults, are mostly due to unhygienic water, and lack of nutritious food. Poor people can not buy calories required for healthy living. Improvement in earning opportunities can only provide resources to meet with the required calorie norms.
- [4] Primary health centres should be well equipped for providing more effective medical services. Sufficient staff and maintenance of centres appear to be the need of the hour. For required medical services our doctors are keeping live rapport with people in villages. Sufficient staff quarters are required to keep staff in villages on a permanent basis.
- [5] Suggestions for the 9th five-year plan.
  - (1) Recruit medical and para-medical staff in PHCs.
  - (2) Provide vehicles in rural areas for extension education programme in collaboration with NGOs.
  - (3) Incentives should be stopped for family planning in the 21st century. As levels of education improve, population control knowledge will improve automatically.
  - (4) Target free approach in family planning to stop wasteful expenditure for population control.
  - (5) Dissemination of population and health education through mass-media.
  - (6) Basic minimum needs for poor people like shelter, full time job, clean water and sufficient food.

**B.M. Jani\*\***

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**\*\* Reader in Economics, Saurashtra University, Rajkot 360 005.**

### Objectives

1. Control of population size
2. Balance between food supply and size of population

### Background

Efficient Manpower Planning - No change in existing system

### Problem & Recommendation

1. To convince uneducated mass about family planning.  
Non-formal education to the poor people

### Action Plan

#### (i) Short Term (2-3 years)

Preventive checks and child care programme

#### (ii) Medium Term (5 years)

Food and nutrition programme; legal abortion

#### (iii) Long Term (10 years)

Population and sex education; steps to improve sanitation and occupational health

### Resource needed

Family planning Department, Animal Husbandry, prepares only district level estimates which are inadequate for estimating requirements for whole of Gujarat.

### Issues

- (1) How does population problem affect the rural development?
- (2) What measures have you initiated?
- (3) How does population problem affect other amenities for people in Gujarat?
- (4) Your suggestions about 9th five-year plan.

### Response

- (1) Population problem affects per capita income and per village availability of physical facilities like, water, food, shelter, clothing and education.
- (2) We have imparted population education programme in rural areas through posters, and motion pictures about benefits of population control. Extension education classes are organised to propagate message of good health and prevention of diseases.
- (3) Population problem results in higher family budget expenditure and Lowers per capita expenditure. Government has to allocate more funds for training manpower in the developmental process. It is the main reason for poverty among poor people.
- (4) Suggestions for population control and livestock management:
  - (1) Joint farming system to stop division and sub-division of land.
  - (2) Amalgamation of small and marginal farmers into co-operative farming.

\* Deputy Director, Animal Husbandry, District Panchayat Office, Rajkot. Twenty two years' professional experience. Made innovative posters for population control and family planning activities.

- (3) Extension education in local language for preventive action against population rise.
- (4) Stop financial incentive for family planning as it is wastage of money.
- (5) Child care measures to stop infant mortality.
- (6) Increase number of doctors in rural areas for health and medical-care services
- (7) Live stock control for their efficient use in economic activities.

**B.M. Jani\*\***

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**\*\* Reader in Economics, Saurashtra University, Rajkot-360 005.**

### Objectives

- (1) Major objective of the population policy must be to control increase in population and try to limit the population of Gujarat to less than 6.5 crores by 2025.
- (2) To improve the quality of the population in terms of health and literacy.

### Background

Most of the fruits of economic development are nullified by the growing numbers. Our per capita income is quite low and millions of people are below the poverty line. Hence controlling our growing number should be on priority agenda. Population control will help us solve unemployment problem in the long run and help in protecting environment through less pollution. It would be easier to handle the problems of drinking water, medical facilities, transport facilities and so on. Population of Gujarat was 4.13 crores in 1991 with a compound growth rate of 1.94 during the period 1981-1991. As it is, it seems that population of Gujarat may cross 8 crores mark by 2025.

### Problems

- [1] There is need to reduce the birth rate of Gujarat from 29.5 to less than 20 by 2001 and still further by 2025. How to achieve this?
- [2] How to reduce the infant mortality rate?
- [3] How to increase the couple protection rate to more than 75% by 2001?
- [4] How to increase the immunisation rate of live births to 100%?
- [5] How to provide ante-natal care to prospective mothers?
- [6] Urban population of Gujarat was 34.49% in 1991. This is likely to be more than 50% in 2025. This will create number of problems, such as, provision of water, residential houses, employment, medical facilities, transport facilities pollution etc. How do you propose to solve these problems?

All the above problems need to be handled efficiently i.e. in a cost-effective way as resources are scarce.

### Recommendations

- 1 It should be noted that effective population policy has many dimensions and must have a long term perspective. It seems in recent years more attention is paid to AIDS control than population control. State seems to have given up population control drive and policy. Effective population control drive must be initiated both for rural and urban areas.
- 2 All political parties must be united in the matter of population control and they should declare it as a national objective.
- 3 People should be educated about the consequences of large size of population. They should be informed regarding the cost of one additional child not only to the family but to the society as well. Booklets written in regional languages should be distributed to the families.

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\* Former Professor and Head, Department of Economics, Bhavnagar University.

- 4 System of incentives, both for the couple as well as for the village/taluka, should be adopted.
- 5 Voluntary organisations, social workers, private doctors etc. must be invited to take this as a national project.
- 6 All possible steps must be taken to provide guidance in the matter of family planning and its advantages. These can include advertisement on TV etc.
- 7 Free provision of contraceptives must be made and public should be informed of the same. This will help in raising couple protection rate.
- 8 For new employees government employment should be based on the condition of adoption of 'one child only' norm.
- 9 Couple going for one child norm must be given encouragement by additional increment both in the public and private sectors.
- 10 Relaxations in income tax should be given to one child families.
- 11 Information regarding ante-natal care should be given to prospective mothers so that they can avail of these services.
- 12 One aspect of the quality of population is literacy and education. All efforts must be made to increase the literacy level, particularly in the rural areas and of women.
- 13 Population education is very important. This should be given in the schools and colleges by doctors with the help of slides, tapes and pictures.
- 14 Urban areas should be better planned and periphery areas may be developed to avoid pressure on the main arteries of the city.

#### **Action Plan**

##### **[1] Short Term**

System of incentives be adopted. Information spread is necessary

##### **[2] Medium Term**

Health care facilities, and related aspects be considered. These may include ante-natal facilities etc. Rural areas need more attention.

##### **[3] Long Term**

Educating the people is the best solution

**Bharati D. Dave\*\***

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**\*\* Reader in Economics, Department of Economics, Bhavnagar University**



### Objectives

- [1] To reduce infant mortality rate below 40 per thousand live births by 2002.
- [2] To lower population growth rate to 1.2% to 1.5% by 2002 and less than 1% by 2016-17 so that quality of people's health and family life improves.
- [3] To bring down birth rate substantially to achieve a decline in rate of population growth.

### Background

Population increase per year is 1.94%, population of Gujarat has gone up from 4.13 crores in 1991 to 4.65 crores at present. Birth rate needs drastic reduction. Couple protection rate (CPR) is 65. This needs to be raised to 90-95.

### Problems & Recommendations

1. High birth rate of 27-28  
Spread awareness about benefits of small family. Universalize female education.
2. IMR is high, maternal mortality is very high.  
Make health facilities adequate and efficient. Improve MCH etc.
3. 35-40% of couples in reproductive age group belong to poor, illiterate households, not yet covered by FWP  
Speed up poverty removal and ensure total female literacy households.

### Action Plan

#### [i] Short Term (2-3 years)

Better monitoring and comprehensive immunization

#### [ii] Medium Term (5 years)

Better infrastructural facilities and expansion of the same.

#### [iii] Long Term (10 years)

Expansion of services and enhancement of quality.

### Resources Needed

- [1] More funds be allocated in state budget and increase it 12-15% annually.
- [2] Equipment supplies to be provided on warfooting, improvement in functioning of PHCs and sub-PHCs etc.

Tushar Harjivandas Chandarana\*\*

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\* Actively associated with several voluntary service organisations and educational institutes, enlightened businessman and youth leader for three decades.

\*\* Lecturer in Journalism

Janak Kumar Gohil\*

### Objectives

- [1] To stabilize state population within a short time.
- [2] To modernize state health infrastructure to cover all the eligible couples under F.W.P.
- [3] To develop human resources to turn people into assets for the state.

### Background

Population increase quite fast yet, present population of Gujarat is 4.13 crores, quality of life inferior in case of families with more children, gender injustice prevalent, poverty 30-35%

### Problems & Recommendations

1. Rapid increase of 1.9% per year, High birth-rate, high IMR.  
Cover all eligible couples under F.W.P. activate machinery.
2. Quality of life inferior  
Provide services, educate poor more effectively.
3. Poverty, unemployment persist inspite of growth, development.  
Peoples' movements and strong public opinion needed.

### Action Plan

#### [1] Short Term (2-3 years)

Reach all eligible couples through F.W.P., assign specific responsibility, use effectively all traditional, non-traditional media.

#### [ii] Medium Term (5 years)

Build system of incentives-disincentives for all couples, raise small family as social value, female education.

#### [iii] Long Term (10 years)

Develop local motivating leadership in each village, town, locality, city, encourage/compel local bodies etc.

### Resources Needed

9th plan onwards, approach each company/corporate organization to fully adopt 25-50 villages.

Ketan Dinkarra Trivedi\*\*

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\* A retired Air Marshal, actively associated with several public affairs, guiding the youth for national service and social objectives, well read on national problems.

\*\* Journalist

Vikrambhai Parmar\*

**Problem**

- [1] Advise for vaccination is not given. Parents do not use vaccination as required and dose is insufficient. No record card of vaccination for village children.

**Recommendation**

Regular vaccination be given for proper effect. It is necessary to preserve vaccines properly for good results.

**Problem**

- [2] Parents are irregular in child vaccination.

**Recommendation**

List of children should be prepared in each village. Investigation and evaluation by Government from time to time. Responsibility should be understood by the parents. Government should approach schools in all villages with a 4-5 years plan, for supervision of regularity in vaccination. House to house visit in each village.

**Problem**

- [3] Poor standards of children and women health. Insufficient food, irregularity of vaccination, slums, low income of family, poverty, high disease incidence, and location of health centres away from the villages.

**Recommendation**

Child development programme should be started in villages to prevent infant mortality. Child welfare schemes and raising the status of women are urgently required.

**Problem**

- [4] Women marriages at a minor age. Frequent pregnancy at a young age. Leading of to early aging, and high risks to the mother and child. Ignorance about methods of preventing conception.

**Recommendation**

Family Welfare Programme should be made more effective to improve living standards of vast masses of poor and those belonging to depressed communities. Various media like T.V., radio, posters etc. may help. Increase female education. Introduce small family concept to help the cause of national and social welfare. Improve access of health services to women and children. Make family planning a mass movement by involving various community groups like zila parishad, panchayat samiti, co-operative societies, and trade unions at the grass root levels. Marriage act should be strictly enforced.

**Problem**

- [5] Various types of diseases in villages.

**Recommendation**

Start health committee under the sarpanch in each village. Experts, doctors should be invited to work in their spare time. Three or four work-shops in a year to provide

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\* Medical doctor and social worker

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guidance for the control of various diseases.

### **Problems**

- 6] There are insufficient facilities for industrial workers: No welfare activities, absence of educational services, and medical facilities. Lack of hospitals and credit societies, housing problem, no playground for children, female workers problems are ignored and high incidence of pollution.

### **Recommendations**

Government should start hospital in each G.I.D.C. area with the help of Industrial Associations. All the facilities included in the factory act should be provided.

**D.R. Bhandari\*\***

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\*\* Lecturer, Shri Vanraj Arts & Commerce College, Dharampur

### Problems

- [1] Vaccines like B.C.G. Triple Polio, and Booster doze are not given in time due to lack of knowledge.
  - Lack of education — proper guidance not received.
  - There is no trust in government vaccine
  - There is no utilization of deep freeze to preserve vaccine
  - Government medicine's quality is substandard.
- [2] The health workers neglect duty. They meet the Panchayat President only to mark their presence.
- [3] Early age of marriage, so birth rate is very high.
- [4] Doctors do not visit Primary Health Centre regularly and are not interested to work in villages in backward areas. Villagers have to wait for a very long time for any medical treatment.
- [5] There are no Primary Health Centre, in industrial areas, so workers suffer sickness quite frequently.
- [6] There is no provision of maternity leave for female workers in industries. They also work very hard during pregnancy leading high infant mortality.
- [7] In Industrial areas there are no schemes for workers' well being. Their children do not get education, health care and playgrounds.
- [8] There are too few educated people in villages to have active health committee.

### Recommendation

- [1] The health centre should formulate a plan for slide show, film show or Video show about the need for vaccine in villages.
- [2] Advertise about vaccines on television. The same should be shown in villages by panchayat.
- [3] Provide deep freeze facility to store vaccine.
- [4] Raising the age of marriage to 18 years for girls and 21 years for boys. The effect of this is that the average number of children born to married women comes down with increase in the age of marriage.
- [5] To introduce in the education system the benefits of small family.
- [6] To make family planning a mass movement by involving various community groups like Zilla Parishad, Panchayat Samiti, Co-operative societies and Trade unions at the grass root levels.
- [7] The programmes of family planning which were adopted include:
  - Dissemination of knowledge about the need and methods of family planning through various mass media like newspapers, radio, T.V.films to create consciousness about the need for limited family.
  - Free or subsidised supply of contraceptives from Health Centres and from other

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\* Agriculture University, Navsari. Ministerial staff member; Vice President of Science Forum, Writes in "Gujarat Mitra"

outlets.

- Financial incentives in the form of cash awards for undergoing sterilisation.
- Motivating eligible couples to use family planning devices.

[8] The Primary Health Centre should be started in every backward area with sufficient staff.

[9] The Primary School should be started for education in every village.

[10] Social programme should be organised once in a week and guidance should be provided about family planning by Panchayat Committee.

**D.R. Bhandari\*\***

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**\*\* Lecturer, Shri Vanraj Arts & Commerce College, Dharampur**

## 2. LITERACY AND EDUCATION

### (i) EXPERTS

Mrs. Ilaben Joshi  
Mr. B S Bhatia  
Ms. Amrapaliben Merchant  
Mr. Tomo Huzumi  
Dr. V C Shah  
Mr Chandrakant Baxi

### (ii) RESOURCE PERSONS

Mr C R Biswas  
Mr B K Sinha  
Mr P V Patel  
Mr Varesh Sinha  
Mr Sudhir Mankad

### 2-A: PRIMARY EDUCATION (Ages 6 - 14)

#### OBJECTIVES:

To provide qualitative primary education  
Universalisation of primary education by 2002.  
Reduce drop-out rate from 56% at present to 20% by 2002.

#### **PROBLEM**

Inadequate number of teachers  
Inadequate number of classrooms  
Unsatisfactory Quality of teachers  
Outdated Syllabus framing  
Boring and Heavy Load on Children

Resource Centers(RC) weak

#### **RECOMMENDATIONS**

1 teacher for every 40 pupils  
1 classroom for every teacher  
Compulsory training for teachers  
General principle of syllabus  
Minimum level of learning  
Balmitra Varg  
Joyful learning (Tarang Ullasmay  
Shikshan)  
Strengthen Resource Centres

### 2-B: HIGH SCHOOL EDUCATION (up to HSC/SSC )

#### OBJECTIVES:

Modernize high school education to make it relevant and effective.

#### **PROBLEM**

Low Standard of teachers  
  
Poorly performing schools  
  
HSC/SSC Boards not broad  
based  
  
Outdated Syllabus

#### **RECOMMENDATIONS**

Review teacher recruitment system  
Improve mechanism of monitoring  
teaching  
Use services of good retired teachers  
Special programs for improvement  
  
Reconstitute Boards, and include  
more experts.  
  
General principle of syllabus  
framing- permanent ongoing  
exercise

Examination system defective  
(copying; memorising without  
understanding)

Modernize examination system

Computer skills not given

Introduce computer courses in all  
Secondary and Higher Secondary  
schools.

## 2-C: HIGHER EDUCATION (after HSC/SSC )

### **OBJECTIVES:**

Revamp and modernize Higher Education and University Education to make it more relevant, flexible and effective.

### **PROBLEM**

Politicization of Management and  
reduce politicization Student Unions

### **RECOMMENDATIONS**

Radical change in University Act to  
in education, and give autonomy.  
Privatization of medical and  
engineering colleges (with due  
safeguards)  
Autonomous Colleges

College Courses too rigid

Make system more flexible

Low Standard of teachers Board;  
State Eligibility

Teacher recruitment by Central  
Test for college teachers.  
Accountability of teachers

Syllabus not revised  
framing exercise

General principle of syllabus  
- permanent ongoing

Examination system defective  
(mass copying, leakage of papers,  
memory test without understanding)

Modernize examination system

Establish an apex institution (Sansriti Kunj Foundation)  
Set up the State Cultural Endowment

Identify:

- જાણ Visual, Performing Arts and Crafts for Documentation.
- જાણ Institutions / individuals for carrying out documentation.
- જાણ the training needs of the human resource presently manning the  
cultural institutions/organizations and the institutes for training them.
- જાણ settlements, habitats, public buildings, archaeological monuments  
and heritage sites for conservation

### **(ii) MEDIUM TERM (5 YEARS)**

Commence documentation through identified institutions / individuals with  
specific time frame.



## II(A). LITERACY AND EDUCATION

Maya Shah\*\*

### [A] Primary Education

#### Objectives

Universalisation of primary education and achieving total literacy.

#### Problems

1. Absenteeism of teachers particularly in rural/remote/tribal areas.
2. Inconsistency between teaching and practising e.g. children are taught to keep the environment clean but there are no toilets/urinals in schools; hence forcing the children to dirty their environment.
3. Poor quality of education leading to very weak fundamentals.
4. Poor motivation of students.
5. Poor motivation of teachers.
6. Poor infrastructure and training facilities and poor dissemination of information.
7. Special problems
  - (i) Girls education - low enrolment and high dropout rates.
  - (ii) Tribal/backward areas e.g. Banaskantha, Panchmahals, Dangs - low enrolment and high dropout rates.

#### Possible reasons

1. (a) Assignment of other duties like census, election, literacy campaign, etc.  
(b) Lack of infrastructural and other facilities  
(c) Single teacher schools
2. Lack of basic facilities and clean place of learning.
3. (a) Young persons (of around 18 years of age) appointed as teachers. They need to mature and refresh their learning.  
(b) Poor infrastructure like class rooms, black boards, maps charts.  
(c) Unfamiliar language, terms and concepts even to teachers.  
(d) Lack of library facilities for children and teachers.
4. (a) Irrelevant education mainly on account of centralisation of syllabi  
(b) Unfamiliar teaching language  
(c) Religious festivals, stories not consistent with local situation  
(d) Ill-equipped schools

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\* Report of the District Level Meeting held on 15-4-1997 at Vadodara.

List of the participants is given in Appendix-I

\*\* Head, Department of Economics, M.S. University, Vadodara.

- (e) Absteeism of teachers
- (f) Single teacher schools
- 5 (a) Very low TA/DA for going in for training and refresher's courses.
- (b) Lack of housing and educational facilities.
- (c) B.Ed. and M.Ed. courses have no training for primary education, so primary school teaching is considered inferior.
- (d) Very low salaries
- (e) Very young age of entry (i.e. after 10th standard) as teachers.
- (f) Not much of a scope for professional growth
- (g) Teachers involved in mid-day meals and students spend time in going to nearby areas to get clean water for washing vessels.
- 6. (a) District level teachers know about MLL but municipal and private school teachers are ignorant about it.
- (b) Lack of monitoring of various training programmes
- (c) Non-availability of relevant data on literacy, enrolment and drop out rates at district/ block and panchayati raj levels.
- (d) Poor maintenance and renovation of school buildings.
- (e) Resource centres do not have financial and other autonomy.
- 7(i) a. Co-ed schools at primary level in villages/tribal areas.
- b. Male - teachers
- c. Low - female literacy in rural areas
- d. Household duties and looking after younger brothers/ sisters
- 7(ii)a. Low literacy and lack of awareness of parents.
- b. Extreme poverty leading to child labour
- c. Migration of parents
- d. Unfamiliar language and irrelevant syllabus
- e. Teachers using children for their personal work
- f. Gloomy and not clean schools
- g. Poor motivation of teachers.
- h. Diarchy on account of government administration on one hand and decentralisation of political system on the other. This results into increased interference of elected leaders.

### Recommendations

- 1. a. Relieving teachers from duties other than teaching and examination.
- b. Improved infrastructural facilities to be provided to teachers.
- 2. Provide urinals, toilets etc. in schools. Provide clean environment.
- 3. a. Provide more opportunities for refresher courses
- b. Improve infrastructural facilities.
- c. Special textbooks to be prepared keeping in mind the regional dialects.
- d. Every school must have a library where charts, maps, educational toys and newspapers are available.

economically relevant education. Effective coordination between schools, AS and NFE centres would ensure better outcomes. Linkages with economic activities, health care and socio-cultural programmes will go a long way in strengthening the primary education efforts in the state.

3. District Primary Education Programme (DPEP) is a programme with a high potential for transforming primary education. DPEP be extended to other districts of the state (besides Banaskantha, Panchmahal and Dangs where it has already been introduced), especially to relatively backward districts like, Sabarkantha, Kutch, Surendranagar, Bharuch, etc. Experience has revealed a rather slow momentum of programme implementation in the three Phase-I districts, due probably to administrative bottlenecks, bureaucratic defaults, political (or other vested interests) intervention and dis-interest or (even) callous indifference of the headmasters and teachers of primary schools or officials of GCERT and DIETs. This should be corrected without further delay through appropriate planning devices and steadfast implementation. Time factor is by far the most important aspect of the programme and ought to be meticulously observed without jeopardising "quality" factor.
4. Training programmes for teachers is most important - it be based on their needs and expectations identified through special surveys. "A bottom-up" rather than "a top-down" approach is more effective. Among the problems confronting the teachers are : (i) synchronizing their efforts with the varying pace at which children learn, (ii) handling difficult situations viz. multi-grade, multi-level and often multi-lingual class rooms, (iii) understanding and justifying their role in achieving the Minimum Levels of Learning (MLL) (iv) attitudinal hurdles e.g. apathy towards learning and consequent emergence as a poor and callous trainee. Government would be well advised, to take cognisance of these facts while designing teacher training programmes.
5. In the entire planning process, due attention be paid to the school environment, teaching methods, class-room practices, and teaching and learning materials (TLC). Community mobilisation and participation is the sine qua non for the success of the Plans to improve primary education in the state. Participatory Rural Appraisal (PRA) adopted in other states is an innovative tool to ensure better understanding among the villagers about their participation in the schooling of their children.
6. Village Education Committees (VECs) should be headed by Village Sarpanch and having as members' : the Headmaster of the local primary school Headmaster, Talati, local leaders of cooperative, religious, women's and social organisations, and progressive farmers/retired officials.
7. Infrastructural development deserves urgent attention - shortage of class-rooms quite serious - fulfill the gap soonest possible with a Perspective Plan keeping in view new entrants for enrolment - explore possibilities of aid from international donor agencies.
8. Equip the existing schools with adequate facilities for safe drinking water, sanitary block (a reserved block for girls), play ground/open air theatre of reasonable size and quality. Make schools/class-rooms attractive as suggested under the concept of Joyful Learning and shift away from burdensome learning.
9. Get rid of malpractices like donations for recruitment/ admission, private tuitions, publication/use of guides (almost) replacing text-books.
10. Social awareness for universal primary education is imperative - set up Parents Associations in every village and enlighten them so as to ensure better delivery of services from schools and teachers - Activate Gram Shikshan Samitis.

11. Syllabi/Curricula be modified and made more realistic in the light of conditions obtained in the rural society - keeping in view the working period of about 8 months in the year. Since education at present is information-oriented, base/foundation of mathematics is gradually weakened. For example, the syllabus for mathematics of Std.V is extremely tough and pupils can't do justice/ feel disheartened. Thus syllabus should be reviewed and made easier/simplified. Syllabus for XII Science is exceedingly difficult and is almost equivalent to syllabus for B.Sc.
12. Examinations need to be reformed in order to minimise copying as follows:
  - (1) two question papers of 1 1/2 hour duration each rather than three hour duration one paper.
  - (2) three or four sets of papers of different colours - red, yellow, blue and green (it is being implemented in Rajasthan),
  - (3) distribution of these papers to students with suitable seat adjustments.
13. Set objective questions. Students should be encouraged to write essays in descriptive matter to widen vocabulary and skills at writing which involve imaginative ability are necessary. Remove the fear of examination from the students - make it a formality as in the U.S.A.

In order to achieve the foregoing plans, good quality teacher is the most crucial requirement. Recruitment procedures, appointments, monitoring and control over teachers all need a thorough overhauling - private teachers being under no control create a anomalous situation. Protection to teachers has done more harm than good. State should not submit to unreasonable demands of teachers' unions. Periodical evaluation of the performance of teachers is advocated. Provide incentives to good teachers, adopt punitive measures for bad/indifferent teachers. Also plan special mid-term orientation/ refresher training for teachers - periodical departmental examinations, seminars, dissertations be made compulsory for teachers so that they will up-date their knowledge about subjects, teaching technology, etc. Headmasters be made to take more classes (more than one as at present) and more restrictions be imposed on their activities - their indifference and callousness in supervision of teachers work, etc. Class-room teaching needs be given more weightage and be substantially improved.

Mid-day meals -MDM is effective in improving school attendance, but it is necessary to remove operational irregularities, eliminate corruption, and give packed food providing better nutrition . Evaluation study for assessment of the impact of MDM scheme with a view to modifying its approach and contents.

### **III. Secondary/higher Secondary Education**

The existing pattern of 10+2+3 is good and needs no revision. Instead of changing the system, suggestions for remedying the defects detected in the system should be given due weightage.

Syllabus and teaching methods need to be revised - "To take classes, to conduct examination and to declare results" is not the be-all and end-all of education. There is hardly any logic in the present approach which does not take proper care of the personality development of the child. Education needs to be restructured more by science, scientific outlook, humanitarian approach and proper logic/thoughtful planning. Education is an integral part of the whole system and, therefore, casual approach to education is highly deplorable. It deserves a much more comprehensive and dignified treatment.

- (a) Internal evaluation of co-curricular activities be given importance
- (b) Regularity in attendance by teachers and students most desirable
- (c) incentives for maximum / improved attendance.

Every school should be compelled to have competent B.Sc., B.Ed. teachers for teaching Maths and Science. Effective use of Science Laboratory is still a far cry in many schools. Correctives are necessary through orientation of teachers and motivation to students.

Secondary and Higher Secondary education being entrusted to the same institution has created numerous bottlenecks e.g. same teachers of secondary schools are assigned teaching HS classes with all concomitant disadvantages. Emergence of serious indiscipline is yet another outcome. There is a need to separate Higher Secondary from Secondary education.

#### **IV. Higher Education**

College teachers receive full salary whereas devote hardly two hours a day to their work. This is especially true about teachers working in morning colleges (which are maximum). These teachers have rarely, if ever, displayed a sense of social accountability.

There is a need for professional management in education. Teachers should make adequate use of library, update their knowledge and in fact, should be asked to submit Monographs/Lesson Notes at the beginning of the year along with a bibliography of 25-30 books/periodicals which they ought to read carefully.

Make computer education compulsory in colleges. Experience of some colleges offering this subject has been quite encouraging - students have benefited a lot in building up their job-professional careers. However, computers (wherever they are installed) are not used for the purpose of training students, very often for monetary gains/consultancy assignments of the concerned faculty. This practice should be stopped forthwith. Fees are very high in private institutes and hence computer training in colleges extremely helpful.

#### **V. Technical Education**

Technical education is extremely important vis-a-vis the industrialisation of the state. However, presently there is no proper manpower planning - dovetailing demand and supply of trained personnel in different trades - turners, fitters boiler attendants, electrical - mechanical- civil engineers etc.

Planning for integration of Vocational schools and technical institutes is necessary. Tackle problem of unemployment through such a planned training process.

#### **6. General**

Neither colleges nor teachers are sufficiently attractive to students. It is necessary to encourage Open University concept and try it out more extensively.

There is a need for conducting research to examine the present disappointment among students, its causes and remedies, for subsequent need-based planning in the light of the findings of such researches or problem oriented studies.

It is desirable to (a) introduce education of ethics in colleges, (b) arrest degeneration of moral values, and (c) minimise the viewing of television to arrest its adverse effects.

## 2. LITERACY AND EDUCATION

Jayantibhai T. Gandhi\*  
Ramanlal Ambalal Joshi\*\*

### Objectives

To improve the quality of primary education.

### Problems

1. Weak performance/low standard of students in primary schools-especially students coming from lower castes
2. Poor quality of teachers
3. High dropout rate of students belonging to SC, ST, and OBC.

### Recommendations

1. Teaching and training in the first and the second standard should be rigorous. The practice of promotion to the next higher class on the basis of attendance in the class should be discontinued. Extra teaching aid to weak students should be provided. However teachers for this work should be other than those for regular teaching.
2. In some of the private primary schools, Dearness Allowance is not paid as per government rules and therefore teachers are not interested in improving their quality of teaching. Each teacher should be asked to take a class in the presence of other teachers in the school. This will induce him/her to improve the quality of teaching. At present, in the primary schools, there is a provision for one teacher per class. This adversely affects teaching. Therefore appointments of teachers should be as per the norms laid down for the secondary schools. The student teacher ratio should be around 50:1 so that a teacher can concentrate on students.

An arrangement of surprise inspection of a school by the authorities on a regular basis would be helpful.

3. Regular supply of books free of charge and financial assistance to students belonging to SC, ST, and OBC will help to reduce the dropout rate. Motivation for attendance should be provided by teachers and other members of society so as to bring about a fall in the dropout rate.

### Action Plan

#### Short Term [2-3 Years]

Rotation of teachers from one class to the other. This will lead to improvement in quality of teaching.

#### Medium Term [10 years]

Setting up training centres and equipping them with modern tools of training for teachers.

B.S. Kantawala\*\*\*

\* I/C Principal, (Experience 34 years DTC, DM), O.L. Pandya High School, Gandhigate, Vadodara.  
 \*\* [Adviser, Gujarat State Private Primary School Teachers' Association and Secretary and Adviser, Vadodara Private Primary School Teachers' Association], O.L. Pandya High School, Gandhigate, Vadodara.  
 \*\*\* Reader in Economics, Department of Economics, Faculty of Arts M.S. University of Baroda, Baroda.

**Objective of the Plan**

To improve the quality of Secondary school education.

**Problems and Recommendations :****[1] Poor quality of teachers.**

At the time of appointment of a teacher, higher weightage should be given to his/her teaching abilities in the class. Refresher course for all secondary school teachers should be compulsory at least once in five years. Principal of a secondary as well as of a higher secondary school should possess at least a Master Degree. The student teacher ratio should be reduced. Computer training both to students and teachers is necessary and the financial assistance for this should be provided by the government of Gujarat.

**[2] Poor performance of SC, ST and OBC students :**

Special coaching should be arranged for such students. They should be provided books and other learning materials free of charge. Alternatively, the financial help during the course of study should be provided on the basis of economic condition irrespective of caste, community, sex etc.

**[3] Whether to continue with the 10 + 2 pattern or to go back to previous pattern of 11 + 4? :**

The system of 10 + 2 is burdensome both to students and parents. It is difficult for a student to decide the stream in which he wants to go. The old system of 11th standard would be better.

**Action Plan****Short Term [2-3 years]**

Special coaching classes for weak students to be taken by those who are not employed in the school.

**Medium Term [5 Years]**

Fully equipped training centres for secondary school teachers and principals should be established.

**B.S. Kantawala\*\***

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\* Principal, R & K Pandya High School, Gandhigate Road, Vadodara.

\*\* Reader in Economics, Department of Economics, Faculty of Arts, M.S. University of Baroda, Baroda.

H. O. Joshi\*

### Objectives

1. Promotion of education among the poor people.
2. Mobilising resources from the private sector.
3. Skill-based and life-centred non-formal educational development.
4. Promotion of female education especially among the poor.

### Background

No change in the existing system of delivery of educational services.

### Problems

1. Qualitative and quantitative dimensions of education.
2. Development of special courses for need based short term education.
3. Identification of non-formally trained people for non-formal education.
4. Female education and work opportunities.

### Recommendations

1. Planning by NCERT
2. Development of on-job courses.
3. Financial incentives.
4. Association of NGOs and other self-help groups.

### Action Plan

#### (i) Short Term (2-3 years)

- Rural**
1. Trainers' training programmes
  2. Active involvement of primary school teachers

- Urban**
1. Industry and Trade should be involved.
  2. Job-oriented education
  3. Teaching material for the blind and physically handicapped.

#### (ii) Medium term (5 years)

Financial Incentives for building up newliterature.

#### (iii) Long Term (10 years)

Development of new teaching techniques for non-formal education.

### Resources Needed

Apart from Government funds resources can and should be mobilised from trade and industry. Sizable resources need to be mobilised.

### Issues

- (1) How to enrol all boys and girls in specific age-groups in the primary schools so as to achieve and maintain certain level at secondary and higher secondary stage?

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\* Dept. of Education, Saurashtra University, Rajkot. Published 5 books and 20 research papers.



- (2) What kind of programme should be introduced by the Government in the IXth five-year plan?
- (3) How to expand need-based non-formal education in the plan ?
- (4) What are the suggestions for sustainable strategy for literacy and education in India ?

### Recommendations

- (1) Mid-day meal scheme should be scrapped and snacks should be given upto the primary school level. The government should move out of the scheme and NGOs should take it over. Some incentives are necessary for the poor children whose parents are living below the poverty line.
- (2) In the IX plan more resources should be allocated for ideal student-teacher ratio, school-rooms, particularly in the backward areas and villages without infrastructure. Number of both schools and teachers needs to be increased.
- (3) For expansion of need-based informal education, the Government should start training-cum-production centres. NGOs should be associated with such teaching/training activities. Short term and long term courses should be introduced. Teaching by non-formally trained people would be helpful in the process.

For adult (female and male) education, services of primary school teachers and young educated unemployed youths should be availed of and they should be offered financial incentives.

- (4) Suggestions for expansion of education and literacy:
  - (A) Education with snacks facilities to the children.
  - (B) Financial incentives to NGOs interested in running and managing the programme.
  - (C) Skill based education should be promoted.
  - (D) Repairing of existing school buildings in rural areas and increase in the number of rooms.
  - (E) Free uniform, free-books and writing material to the children of families living below the poverty line.
  - (F) Financial incentives for publication of literature for schools.
  - (G) Industrial units should be persuaded to finance education of the children of their workers upto the Higher Secondary level.
  - (H) Women's organisations should shoulder responsibility to educate women in both urban and rural areas.
  - (I) Scientific manpower planning is necessary.

**B. M. Jani\***

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\* Reader in Economics, Saurashtra University, Rajkot-360005.

**Interview 2.4**

**D. A. Uchat\***

**Objectives**

1. Development of Non-technical education
2. Updating Higher Technical and non-technical education in Gujarat.
3. Efficient H.R.D. Planning.

**Background**

Change in the system is required. Higher education with interaction of industry for need-based educational development.

**Problems**

1. Reservation system in Higher Education Courses.
2. Indian manpower migrating abroad.
3. Donation seats and poor output in Medical and Engineering Education.
4. Index-based rise in fees.

**Recommendations**

1. Politicians should not intervene in the area of education for getting votes.
2. Cess on migrating people.
3. Enhancing quality of higher education.
4. Public opinion to be mobilised before raising tuition fees in educational institutions.

**Action Plan**

**(i) Short term [2-3 years]**

For Primary Education, quantitative aspect of Education to be emphasised and for higher education, quality of education.

**(ii) Medium term [5 years]**

Preparation of courses expected by the market.

**(iii) Long Term [10 years]**

Master plan for quality of education. Each faculty of learning should be updating its courses. Planning of pattern of education and time bound implementation are required.

**Resources needed**

Central Government should fund higher education and states should finance primary to High School level education. Systematic financial planning is required to mobilise resources.

**Higher Education Funding**

India is a capital-deficit country. Financial resources are limited and sizeable amount is spent from out of the budget to finance primary, secondary and higher education.

**Issues**

1. What are the ways and means to finance non-technical higher education in Gujarat?
2. How to develop fund for technical higher education apart from Government's share?

\* Professor & Head Dept. of Education, Rajkot. - 8 books published - guided 80 dissertations- produced 15 Ph.Ds - 60 papers.

3. How to link higher education to R & D in industry?
4. Modus operandi for index-based rise in fees.
5. What should be the policy of Government of India in respect of migration of young post-graduates and Doctorates in science and technology to foreign countries ?

### Recommendations

1. Government should continue to grant full funding of non-technical education in order to increase quantity and improve quality of skilled manpower. However, NGOs may be associated for funding special chairs in higher education and instituting scholarships.
2. Industry is using technically skilled manpower. Therefore, considerable scope exists for imposing an education cess on the industry so as to finance partially technical and management education in India.
3. Industry should contribute to creation of talents. For this, there should be a link between universities or institute of higher learning and industry for funding.
4. People's participation in mobilization of public opinion to raise fees for higher education appears to be essential in all faculties of higher learning. Index-based fees system should be introduced. For this, Parliament and Legislative Assemblies should allow educational institutions to raise fees. Otherwise, it will become a political issue for strikes in colleges and universities. Rotary club, Lions club and other NGOs should be associated in meetings for raising fees in order to convince different social groups.
5. As a policy the government should introduce lead colleges and lead university departments to offer instructions in particular courses. Duplication should be avoided.
  - Privatisation process in higher education is necessary. The big industrial houses should run management and engineering institutions for self-financing courses.
  - Donation seats and donation admission system is introduced by political leaders and big IAS officers to educate their sons and daughters. Merit based education system should be developed.
  - Reservation on the basis of caste in higher learning should be scrapped. Only economic backwardness should be considered as a criterion.
  - Persons educated in India and migrating abroad should pay at least Rs.50,000 as education cess as large amounts of money were spent by the society and government towards their education

**B.M. Jani\***

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\* Reader in Economics, Saurashtra University, Rajkot 360 005.

Chandrakant Bhogayata\*

**Objectives**

The broad objectives of the primary education policy may be:

1. to provide primary education universally
2. to improve quality of primary education.
3. to reduce the dropout rate.
4. to improve capabilities of teachers.
5. to improve management of education.

**Problems**

1. There are a number of posts of teachers vacant in the primary schools throughout the state. This affects the system very adversely.
2. In many schools, the number of rooms is less than required making it necessary for students of two different standards to sit in the same room. Consequently inadequate attention is paid to students of both the standards.
3. The goal of 100% enrollment is yet to be achieved. This is especially so in rural areas and for girls.
4. High Dropout rate is still one of the major problems of primary education.
5. Teacher's training programmes are not up to the mark and are inadequate in number. Consequently few teachers are given such inservice training.
6. In the area of management of primary education, much needs to be done as it affects the general morale of teachers. Rewards to teachers are not logically correlated to their work. There are delays in the area of recruitment at various stages such as advertisements, interviews and appointments. Non availability of teachers' quarters has led to many problems.

**Recommendations**

1. Vacant posts should be filled in at the earliest.
2. Adequate number of rooms should be provided to each school.
3. School should be made as attractive as possible by providing play ground, garden etc. so that the parents are encouraged to send their children to the schools and children will also like to go to the schools.
4. In order to reduce the dropout rate the school should have additional facilities which might help keeping the child at the school. These can include sports, music etc. Clean urinals for boys and girls separate, white washing of school walls and exhibiting photos of great sons of India like Vivekanand, Gandhiji etc. can inspire the children. Character building slogans written on the walls can go a long way.
5. In service teachers' training programmes so as to cover maximum number of teachers should be undertaken.
6. A system should be evolved in which reward and effort are linked. Recruitment system should be streamlined. Adequate number of staff quarters should be constructed.

Night school plan particularly in the rural areas should be implemented vigorously.

\* Prof. & Head, Department of Education, Bhavnagar University.

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**Action plan**

**1. Short term (2-3 years)**

Requirement: of teachers should be given prime attention.

**2. Medium term (5 years)**

Teachers' training and buildings for the school and staff quarters.

**3. Long term (10 years)**

Measures to improve the entire management of education so as to make it more efficient.

**Bharati D Dave\***

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\* Reader in Economics, Department of Economics, Bhavnagar University

**Objectives**

1. To enrol additional 15 lakhs children.
2. Effectively retain and help them to achieve Minimum Level Learning (MLL) to solve problem of dropouts and stagnation.
3. To provide physical facilities and teachers in village-schools. To formulate policy and programme for quality in education at all levels.

**Background**

Educational expansion wide and rapid yet numerous deficiencies experienced. Whole system is in bad shape. Not able to cope up with increasing demands - problem ridden. Lacks many desirable aspects.

**Problems**

1. Serious problems in primary education. High percentage of school dropouts and non-achieving students.
2. Inadequacy of resources and inferior quality of education.
3. Absence of modern methods of organisation and management of institutions. Supervision non-functioning.

**Recommendations**

1. Increase number of schools, class-rooms, recruit teachers on war footing. Motivate teachers and parents.
2. Increased allocation of 10 to 12% financial resources annually. Get recommendations from "commission on quality improvement in EDN".
3. Introduce modern methods of organisation and management at all levels, activate supervision and enforce discipline.

**Action Plan****1. Short Term (2-3 years)**

Appoint the needed number of primary teachers and open required number of schools every year. Introduce innovations.

**2. Medium Term (5 years)**

Make annual plan of expansion and development of education. Search new financial resources.

**3. Long term (10 years)**

Appoint permanent expert commission to advise Government. Allow autonomy. Decentralize.

**Resources needed**

Withdraw free or nearly free education for the rich and higher middle class. Allow charging of reasonable fees for quality education. Launch movement for wider public involvement. Create ambitious financial foundations for injecting quality.

**Subhaschandra Shankarlal Nayee\***

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\* Lecturer in Psychology.

\* Educationists, social activist, several cultural activities organized by him. Retired principal of a High School.

Naranbhai Patel\*

**Objectives**

1. To improve and modernize education at all levels and in all sectors.
2. To make secondary and higher secondary education effective.
3. To diversify and restructure college - University education.

**Background**

Significant expansion, total budget allocation (97-98) Rs.22 billions. Number of students in schools over 60 lakhs, in colleges - Universities over 6 lakhs, Quality suffers at all levels. System performs below average. System not consistent with the needs, aspirations etc.

**Problems**

1. Shortage of resources - financial, physical etc.
2. Quality below average at all levels.
3. Higher education needs radical transformation.

**Recommendations**

1. Provide in a phased manner 6% of the State domestic product and 15-20% of the Annual Budget.
2. Devise concrete programmes for quality
3. Establish skill formation Institutes and provide autonomy to them.

**Action Plan****(i) Short term (2-3 years)**

Provide more resources, enforce performance, regular supervision.

**(ii) Medium term (5 years)**

Estimate man-power needs carefully, plan higher education on that basis.

**(iii) Long term (10 years)**

Political and academic leadership needed for real and relevant changes, -management of changes important.

**Resource needed**

Raise percentage of state budget for education, allow charging of fees from those who can afford.

For effective literacy, people's involvement is needed.

Ketan Dinkarray Trivedi\*\*

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\* Sarvodaya worker, practicing Gandhian approaches in social work.

\*\* Journalist - (Amreli).

## Interview 2.8

Shripaul R. Ratnikar\*

The problems and recommendation on the above topic are listed below:

1. Primary schools have several problems - the inadequate number of classrooms (the number runs into thousands) and teaching staff. As a result of all these primary education suffers from the dangerous academic disease of dropouts.
  - (i) Diversion of more financial aid to primary education.
  - (ii) Drastic steps should be taken for making it compulsory. If necessary even the guardians can be penalized.
  - (iii) Establishing primary school in every village with the required number of classrooms and equipment.
  - (iv) Local candidates should be appointed as a teachers.
2. Free education for all girls at all levels is not necessary.
  - (i) Fees should be charged on basis of economic condition This will strengthen the hands of Government to render more financial aid to primary education.
3. Unnecessary rush towards college education should be resisted.
  - (i) Organise seminars on career guidance in Higher secondary schools.
  - (ii) Divert the vocational stream students to I.T.I., Polytechnics and other professional technical training centres recognised by the Government.
  - (iii) Encourage H.S.C.- passed students to apply for public examinations.
4. The quality of education has deteriorated. Following steps should be taken to improve the quality of education.
  - (i) Establishment of good reading rooms & well equipped libraries in all schools and colleges.
  - (ii) The institutions to be equipped with well-read and intelligent staff.
  - (iii) Organize seminars, conferences, workshop for teachers. Their attendance at seminars etc. should be considered while assessing their work.
  - (iv) Sincerity and loyalty of a teacher should be appreciated and rewarded.
  - (v) Mark attendance of students in the first and the last period.
  - (vi) Tax- exemption for all teachers.
5. Publication of Text Books under the government scheme needs careful attention.
  - (i) Lesson of expert authors from all walks of life should be covered.
  - (ii) Text Book Committee be constituted with expert members from various fields.
  - (iii) At the time of producing a text book, level of students should be considered.
  - (iv) Various topics should be judiciously selected.
6. Our examination system suffers from various problems like corruption, nepotism, copying, delay in examination results etc.
  - (i) Lecture method should be discouraged.
  - (ii) Dictation of notes should be discouraged even with a threat of penalty.

\* Retired Principal at D.D. High School of Girls, Navsari. Trustee of the Navsari Kelvani Mandal.



- (iii) Use of new technology- audio, visual, film scripts, hand books etc.
  - (iv) Teacher - taught ratio should be raised.
8. Selection process of teachers is defective.
- (i) Stress on the merits of a candidate.
  - (ii) Previous experience should be considered.
  - (iii) Published articles and participation in public seminars & conferences should be considered.
  - (iv) Moral character is important.

**V.D. Patel\***

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\* Lecturer, Vanraj Arts & Commerce College, Dharampur

N.K. Pandya\*

Education aims at creating excellence and all round development of students.

1. In the constitution of India, free, compulsory and universal primary education is envisaged. After 50 years of independence we are still stressing adult education because our primary education system is defective.
  - (i) Educational awareness should be created in the backward classes by means of adult education.
  - (ii) In every village primary school should be opened with adequate class rooms and staff.
  - (iii) Vacations should be restructured according to agricultural seasons.
  - (iv) Lessons of family planning must be taught in adult education classes.
  - (v) Local teachers should be appointed in primary schools.
  - (vi) Regional vocational subjects should be introduced.
  - (vii) Malpractices in private primary schools should be targeted.
2. Economic, sociological and cultural change can be achieved through better education.
  - (i) Gandhi's theme of Nai Talim should be adopted, which develops productive skills, social & cultural responsibilities among students.
  - (ii) In the secondary schools basic subjects should be the same, but the standards of evaluation should be different for students in urban areas.
3. Problems of choice arise at the higher secondary level. In the absence of proper guidance student's career is often disturbed.
  - (i) Career guidance camps should be organised in every school.
  - (ii) In the interest of the students personal care should be taken by teachers and guardians.
  - (iii) Educational facilities for higher education should be improved year after year.
  - (iv) The number of Vocational schools should be increased.
4. On the one hand, there is a problem of unemployment and on the other, requirements of employers are not satisfied.
  - (i) Various courses should be started in accordance with demand.
  - (ii) Vocational colleges with modern equipments and hostel facilities should be started.
  - (iii) Admission to various degree courses should be given on the basis of estimated needs and manpower requirement.
  - (iv) Gracing must be stopped and 50% of passing standard should be introduced.
5. Standard of education is deteriorating. Student -teacher relation and efficiency of teacher are also going down.
  - (i) Additional increments should be given to honest and hard-working teachers.
  - (ii) Corruption should be eliminated from the selection process of teachers.

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\* Poet and Critic (Valsad)

- (iii) Working days of college and university teachers should be increased.
  - (iv) Teacher-taught ratio should be maximum 1:50. This is for the benefit of students.
  - (v) Library should be up-to-date with the latest information & equipments.
  - (vi) Weightage should be given to activities of N.S.S. and N.C.C.
6. Defective teaching method affects quality of education.
- (i) Internal examination system should be improved.
  - (ii) For the sake of feed back, results of the internal examination should be given speedily.
  - (iii) Encourage students to ask question in the class room.
7. Better educational environment should be created in the whole state. Following steps should be taken by the government.
- (i) Public library facilities should be increased.
  - (ii) Control of population by literacy mission programme.
  - (iii) Bright students should be encouraged by the society.
  - (iv) Increase the number of scholarships.
  - (v) Old schools should be better equipped by the government aid.
  - (vi) Flexible educational grant policy should be adopted by the government.
  - (vii) To avoid corruption strict legal steps should be taken.
  - (viii) The number of residential secondary schools should be increased.
  - (ix) Special & specific grants should be released to the schools for introducing modern educational technology.

**V.D. Patel\***

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\* Lecturer, Vanraj Arts & Commerce College, Dharampur.

## Problems

### 1. Finance

Inadequate funds at all levels of education is the root cause of all problems.

### 2. Demand Supply gap

There is enormous gap in the demand for education and infrastructure available to meet this demand. As a consequence it leads to corrupt practices in education, particularly in urban areas.

### 3. Drop outs

The problem of higher dropouts in Corporation and Panchayat run schools is a cause of serious concern. The problem is severe in tribal areas.

Educational facilities are essential for social infrastructure to supplement the economic infrastructure created through various development plans. The state has accorded high priority for the development of education. Accordingly, pace of literacy programmes for women, universalising primary education and eradicating adult illiteracy among adults are the key objectives for general education.

### 4. Low Spread of Primary Education

Due to lack of adequate facilities and for several other reasons primary education is not universalised. The situation is worse for certain disadvantaged groups of people.

### 5. Government Interference

Unnecessary interference by government in the affairs of the academic institutions give rise to serious administrative problems which ultimately result in deterioration of academic standards. The government policies on economy drives, recruitment, setting up new academic institutions etc. are the causes of many problems in the academic field.

### 6. Indiscipline

Rising indiscipline among students and prevalence of trade unions of teachers and their disruptive activities are the serious problems which require adequate attention.

### 7. Insufficient Effective Teaching Days

The number of effective teaching days during a year is falling at all levels of education under various pretexts. The situation is worse in rural areas and in colleges (urban and rural).

### 8. High Burden

High burden on pre-primary and primary school-going children is harmful for their mental and physical development.

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\* Chairman, Sarvejank Education Society, Surat.  
Actively engaged in management of educational institutions for last 20 years, Chairman of Engineering College. Secretary Deaf and Dumb School and Member, Managing Committee, Southern Gujarat Chamber of Commerce and Industries.

\*\* Ex. Principal of M.T.B. College, 2, Surat.  
Journalist; Professor of English and actively engaged in managing educational institutions.

## 9. Irrelevant Courses

Most of the universities have irrelevant and obsolete courses. This leads to social waste and improper utilisation of scarce resources.

### Measures

1. **Liberalisation and Self-financed education:** Education should be freed from the shackles of government controls. In particular, government should keep its hands off from secondary and higher education. The released funds should be diverted for universalising primary education. Free studentships should be made available to meritorious students of weaker sections for pursuing secondary and higher education. There should not be free education for all girls. Those who can afford should pay for their education.  
Moreover, the government should remove all unnecessary controls. This will enable the management for undertaking developmental work. The government policies should not be contradictory and inconsistent. The economy drive measures for the recruitment of the teachers is ill-conceived. The condition of keeping deposits with the government for setting up a new school also prevents many managements from opening new schools. This control worsens supply-demand gap.
2. **Higher Budgetary Allocation** The government should make more investment in this important social infrastructure.
3. **Continuation of Mid-Day Meal Programme:** In order to prevent high dropouts it is necessary to continue the Mid-Day Meal programme. Some other such measures should also be introduced, so that many students may be attracted and retained till they complete primary education. The teaching schedule should be restricted which may be suitable to local needs.
4. **Utilisation of Physical infrastructure:** The available physical infrastructure is not adequately utilised. It is necessary to devise some well-thought policy measures to make full utilisation of infrastructure.
5. **Reduction in number of Holidays:** The government should reduce the number of holidays and curtail vacations in order to increase effective teaching days.
6. **Some other Measures:**
  - The burden on pre-primary and primary school going children should be reduced.
  - Strict discipline among students should be imposed.
  - Relevant courses should be introduced in the field of higher education.
  - Pre-primary education Act should be promulgated in order to reduce irregularities.
  - Administration and management of education should be modernised.

Kiran Pandya\*

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\* Department of Economics, South Gujarat University, Surat 395007

Pravin Sheth\*

**Problems & Recommendations****High School Education (up to HSC/SSC)**

1. Low standard of teachers  
Teachers Training Centers should be improved. New teaching techniques, and materials should be introduced
2. Poorly performing schools  
Setting up practicable norms and rigorous inspection
3. HSC/SSC Boards not broad based  
Social educationists from formal and non-formal areas should be included.
4. Outdated Syllabus  
All the courses need to be completely modernized reflecting the latest research and relevant subjects
5. Examination system defective  
Objective text format should be adopted after orienting teachers and students.
6. Computer skills not given  
Infrastructure should be provided along with orientation of teachers in computer field
7. Need based education planning  
Very much necessary
8. Vocationalisation of education  
More schools in this field with properly trained teachers be provided
9. Creating competitive environment  
Healthy competition among students among schools should be encouraged.

**Higher Education (after HSC/SSC)**

1. Politicization of management and student unions  
Political intervention of the concerned department of the government & political leaders should be curtailed.
2. College Courses too rigid  
Optional courses reflecting development in various discipline should be adopted and revised with a proper time frame
3. Low standard of teachers  
Compulsory orientation and refreshment courses should be arranged for the

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\* Visiting Professor, Gujarat Vidyapith, Research in the field of political science, environment and public activities around the issues of development.

teachers and there should be evaluation of their publication and participation in seminars

4. Examination system

The traditional system should be discarded as it has become the only major function for universities. Alternative system of term papers, internal assessment and pattern of examination papers as practised in Western universities should be adopted.

6. College hours - not enough to impart good education

Compulsory attendance of teachers and students in the college for 5 to 6 hours should be formally decided and implemented.

7. Medium of instruction

Gujarati, Hindi or English as opted by the student, but with a condition that they should know English. One course in English should be compulsory for all students & performance in this course should be counted in the final examination.

8. Quality of language

Professors & lecturers should be trained by proper teachers who are good in language.

**T.R. Sukumari Murty\***

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\*\* Research Officer, Sardar Patel Institute of Economic and Social Research, Ahmedabad

## Interview 2.12

Daudbhai Gandhi\*

**Primary**

A good teacher is the first necessity. Any school must be in half km. distance in the rural area.

A desirable teacher student ratio is 1-30; but in some area it is 1-90. Many industrialists are ready to sponsor the teachers. This novel scheme will be helpful.

It is possible to have the necessary class rooms within the budget limit using low cost plans. Operation Black Board scheme has failed. But one should try again with some reform.

Introduce evaluation and observation system in the examination. Children are not ready for examination at this tender age.

To improve the standard of teacher by training them again after P.T.C.

There should be a Board for preparing syllabus. Syllabus should be modern. Subjects should not be boring.

Resource centres are weak due to shortage of staff. More funds should be provided to resource centre.

**Higher Education (upto HSC/SSC)**

At least the teacher should be M.A. B.Ed. After getting jobs, teachers do not work properly. To work properly, there should be a reward system. So teachers would improve the standard themselves.

So far as the poorly performing schools are concerned, last year 1995-96 in Gujarat, 200 school got 0% result at SSC level. This is due to commercialisation of the education. Teachers are appointed with donation. They are trying to recover the money back and they are not interested in the education.

Board of education should have autonomous power. Both the boards should merge (SSC/HSC).

To change the defective system of examination, reduce the time duration of examination. Examination duration should be one and half hours. U.P.S.C. and Bank examination have this type of time limit. Centres are responsible for malpractices. Put these type of centres on black list and punish the responsible people. This problem can be solved by appointing an examination cell.

**Higher Education (after SSC/HSC)**

All the college courses are rigid, and syllabi are out dated. There should be autonomy for courses and syllabus as in D.D. Desai Institute of Technology.

Teacher can create wonders. Big buildings of colleges are not necessary. The money should be invested for good education rather in buildings.

P.M. Patel\*\*

\* Ex-Pro Vice Chancellor, North Gujarat University - 87-94. Full Bright Scholar (three time) USA Member Advisory Board of Education, Advisory Board of Gujarat Council of Education and Technology Board, Text book Board, Primary Education Board, Higher Secondary Board, Banking Service Board. Former Principal - N.S. Patel Education College, Modasa.

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Dhimbhai P. Thaker\*

**Primary**

To teach in a primary school is more difficult than in high school. So, the best teachers should be employed for primary teaching. B.Ed. teachers who are unemployed can be engaged. They may be ready.

Sufficient number of class rooms are necessary. But all of them need not be of cement and bricks.

There should no examination. Teaching should include the tests. Rating system should be introduced instead of examination. Children can get knowledge by observation.

The quality of teacher is unsatisfactory. Primary teachers are engaged in many occupations in rural as well as in urban areas. Teachers should not be allowed this type of occupations.

Those who have constant touch with primary education should be appointed to teach.

There is a boring heavy load on children at primary stage. Interest, attention and understanding are co-related in education. More and more involvement of the teacher with pupils is necessary.

Some teachers are money minded. They purchase useless books from book-sellers and ask the pupils to purchase them.

**Higher Education (upto HSC/SSC)**

Low standard of teachers is due to politics. There should be a Board to appoint the teachers. Schools are poorly performing.

There should be no examination. Introduce rating system.

**Higher Education (after HSC/SSC)**

In college, rarely teachers are found of the expected standard. First class is obtained by fair and unfair means. Knowledge is important.

According to the changing requirements, courses should be prepared. Achievement should not be measured by the number of students. It is waste of money. To reduce the number of students, there should be screening for college education. To avoid mass coping, test should be taken every fortnight. Amount of expenditure is not the parameter of educational development.

P.M. Patel\*\*

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\* Dr. Thaker is Managing Trustee, Gujarati Visvakosh Recipient Ranjit Suvarna Chandrak award for Gujarati language. Well-known critique for Gujarati language.  
Ex-Principal, Sir P.T. Arts and Science College, Modasa.

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### Primary Education

There has not been new appointment for last five years in majority of districts. It is due to some reasons like lack of finance, administrative delays etc. In the state 17 per cent of posts of teachers are vacant. Teachers should remain present at the village or campus as in Sarvodaya School. So this problem can be solved partly.

The quality of the teacher is somewhat good. But they have no integrity.

There should be change in syllabus. The mathematics subject has difficult course content. There should be lower level and higher mathematics courses. So student can take up the course according to his/her capacity.

School may have instruments useful for practicals in science courses, but the teachers do not use them.

### Higher Education (upto SSC/HSC)

Good management schools have good teachers.

Poorly performing schools are also there. Sometimes teachers make ghost enrollment to retain their job. Ultimately this occurs in dropout rate and zero percent result.

Syllabus must be changed according to the need. There should be acceptability of syllabus by the majority of the students. Current syllabus is partly out-dated.

Computer is a necessary evil. It will create unemployment. The education of computer is good at the standard twelfth level.

### Higher Education (after SSC/HSC)

Student unions is a gift given by the politicians. The troubles or riots in colleges are instigated by the politicians.

College courses are rigid. The time for change is now. There must be learned experts for the course preparation.

- Coping in examination is mostly done for getting higher percentage. There should be graduation system to avoid this nuisance. It will help to reduce the evil of copying.

Ila K. Shah\*\*

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\* Ex-Minister for Education Founder Member, Bhal Seva Samiti  
Ex-Chairman, Education Committee, Ahmedabad Dist. Activist, Rural area and Education - Tribal Area, etc.

\*\* Sardar Patel Institute of Economic & Social Research, Ahmedabad.

**Objectives**

- Vocationalization of education
- Encouragement of distance and open learning
- Partnership of people in education at all levels.

**PRIMARY EDUCATION****Action Plan****(i) Short term**

No need to open new schools. (2-3 years) Strengthen the old schools; provide infrastructure facilities and training of the teachers.

**(ii) Medium Term (5 years)**

Phase-wise plan of action to add new schools, training facilities of the teachers & recruitment of teachers.

Also permit privitisation of school education.

Finally decentralization of school education.

**Resources Needed**

Given the resource constraints, the government must move towards partnership of people and government. This seems to be the only way to generate needed resources.

**B. High School Education**

1. Vocationalization of education is the need of hour. It is high time that the state moves from conventional education to vocationalization of education. The vocationalization of education must be differentiated from vocational education.
2. Value of education and respect for "manual work" have been gradually eroding from the social life. Educational institutions and planners must once again incorporate these two aspects of education in the school education.
3. Earlier efforts of giving computer education through "class" project did not take off the ground. In the mean time, private institutions have commercialized computer education. There is a need to re-examine the issue of computer education as "skill" development for the students of HSC/SSC.
4. Examination system, as it stands, has led to "private tuitions" as the only means to get good grade. Some serious efforts are required to change this system and thereby reduce external dependence for passing examination.
5. Teachers training needs to be improved to raise the quality of education.

**Action Plan for HSC/SSC****1. Short term (2-3 years)**

Change in examination system and decentralized examination system of the regional/district level.

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\* M.S, Ph.D, former Director MICA, currently Director TALEEM, Research Foundation. Dr. Agrawal is involved in teaching and research for the last 25 years.

## **2. Medium term**

Introduction of courses for vocationalization of education - keeping in view the Industrial Plan of Gujarat.

## **3. Long term**

Move out of existing educational method and start the courses in such a way that the students do not carry any home work at home "No Home Work" approach of education must be followed.

### **Higher Education**

1. Certification / degree as means of getting a job approach must change. To-day we use "filter" technique of selection. This must also go because of this there is a high degree of politicization. Removal of earlier factor would take care of the later problem.
2. Restriction for the entry in higher education seems to be a solution to the problems of higher education. There must be a way of guiding the students and discouraging from going to higher education. Instead they should be encouraged to join professional courses.
3. A large number of old courses are not needed to-day. They must be dropped and such departments should be closed down. To protect the jobs of the teachers, they should be retrained to look after "educational administration".

**Rekha Kotak\***

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**Problem**

The major problem is both quantitative and qualitative. However, our approach tends to be rather only quantitative. Apart from physical inadequacy little concern is given to maintain good standards. So far as the quality of teachers is concerned, quite a lot of them fail to come up to the mark. Apart from boredom and load, the resource centres are nearly non-existent.

**High School Education (upto HSC/SCC)**

- 1 Educational Boards are mainly concerned with examinations.
- 2 Computer trainings not given.
- 3 The class room situation is both moribund and dismal.
- 4 Lack of motivation is the major problem for the teacher.

**Recommendation**

- 1 Private tuitions and declining class room teaching standards have formed a vicious circle. This should be removed by bureaucratic and political wills.
- 2 One of the main problems is to redeem education of the overwhelming examination oriented system. Due to the pressure of examination work the teachers are not able to focus attention on everyday teaching and students also skip the classes because of the present examination system.
- 3 The class room teaching should be self-supporting and self-sufficient for the students. If students do not attend their classes and if teachers also do not focus on teaching in the classroom, the class room teaching may collapse. Hence, it is required to keep alive the class-room teaching by reducing number of examinations thereby increasing the number of teaching days. Students must be punished for remaining absent in the class-rooms. The need is also felt to find out innovative methods of teaching by using modern equipments.
- 4 It is also suggested that Government should adopt strict measures to ensure the availability of infrastructure (play-ground, sanitary needs separate for boys & girls, trees, etc.) necessary to start a new school.
- 5 The current status of the school is not upto the mark. Many of the schools in urban areas do not have enough facilities for students and teachers. The teachers do not perform their duties as expected. They seem to be responsible to none. There is corruption in appointment of teachers. Some of the schools in the urban areas give admission by accepting donations. This should be removed by taking strict action.

Alka Dave\*\*

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\* C.N. Vidyalaya, Ahmedabad

\*\* Sardar Patel Institute of Economic and Social Research, Ahmedabad.

**Objective**

To develop potentiality of children.

**PRE-PRIMARY EDUCATION (Ages 2.5 - 5)****Background**

Pre-primary education is most important part of education but unfortunately this stage is neglected. Children of these ages should be educated by montasory system or Gijubhai Badheka's method. Most of schools do not have equipments for it. Some who do have, keep them in showcase and do not use for the children.

Most of guardians believe that imparting education to children can be done by teachers only. Actually guardian and especially mother can play an important role in the education and development of children.

Managements have to pay full salary to the trained teachers, therefore, managements don't engage trained teachers, it becomes a big obstacle in the development of children.

**Problems & Recommendations**

Potential and personality development is satisfactory. To engage trained teachers only.

To search for new teaching aids for intellectual development at low cost for kindergartens.

Guardians should be taught the subjects like Child psychology, child-care, food and nutrition sanitation and hygiene, first aids etc.

Full and revised salary should be paid to the pre-primary teachers direct by the government.

The teacher should take keen interest for the development of every child personally.

Use of teaching aids must be compulsory.

**Ghanshyam Upadhyay\*\***

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\* The Managing Trustee of Dakshina Murti Education Institute, Bhavnagar.

\*\* Bhavnagar.

**A:Pre-primary Education (Ages 2.5 - 5)**

The state government has ordered that students must not be failed up to fourth standard; as a result teachers especially in rural areas became negligent and lazy. Most of the teachers do not know the proper method of primary education. Some of them believe that it is not feasible to educate children methodically when there is big class.

The officers of education department are sometimes not aware about principles of education, they are certainly aware about their powers and authority on school managements.

Private schools in urban areas take huge amount of donation and earn profit but low salary to the teachers. Ultimately teachers take interest in private tuitions instead of teaching in schools.

**Problems & Recommendations**

Quality of education is very low; schools do not help student to be self-reliant

To re-think about passing every student upto fourth standard. .

Proper teaching method should be known by every teacher and children should be taught by that method. The motto of education should be 'Teach with love'.

Every school must have certain minimum amount of teaching aids of library, laboratory, charts etc. and they should regularly use them.

The officers of education department should have responsibility for good education and good results in their jurisdiction.

To make interesting syllabus. Guardians should realise that education is not only for making money, they should also take interest in the development of their children.

Value of "job-satisfaction" should created in the society.

Importance of manual labour should be increased.

All the teachers especially private school teachers should be paid their salary directly by government, and government should receive the amount from school-management.

A teacher should be fearless. Teachers should be honored by the government officers, political leaders and the society.

**Ghanshyam Upadhyay\*\***

\* Ex-Principal of Dakshina Murti Education Institute, Bhavnagar.

\*\* Bhavnagar

### 3. ENVIRONMENT AND AFFORESTATION

**(i) EXPERTS**

Mr. D.A. Anandpura

Mr. Kartikeya Sarabhai

**(ii) RESOURCE PERSONS**

Mr. T C A Rangadurai, ACS (Forest&Env)

Mr. Fatehsinh Jasol, ACS, Transport, HD

#### ENVIRONMENT - INDUSTRIAL POLLUTION CONTROL

**OBJECTIVES:**

Achieve total compliance of Pollution Control Norms by 2000.

**BACKGROUND:**

Industries in Gujarat generate export revenue and employment, but cause pollution. This adversely affects environment, water resources, marine life, land, health and safety. Industries are now setting up individual primary treatment plants, and collective CETP (Common Effluent Treatment Plants). Structural analysis:

**PROBLEM**

**RECOMMENDATIONS**

CETPs are very costly

Incentives for pollution control e.g. grant 'industry status' to all pollution control projects, make land available for CETPs, soft loans, etc.

Unsatisfactory disposal of waste

Upgrade infrastructure for collection, treatment, conveyance and disposal of waste.

Identify, screen, validate and demonstrate effective in -process and end-of-pipe waste minimization technologies and processes.

- \* Encourage R&D for recycling, reduction, recovery strategies.
- \* Establish new industries which support these measures.

Outdated technology:

Establish pool of experts from industry, academia and R&D institutions to bring awareness of state-of-the-art approaches, and validate technologies and procedures for carrying out EIAs which integrate local considerations.

Heavy life and property loss during disasters:

Formulate comprehensive disaster management during strategies

Low public awareness

Raise public awareness and strengthen mechanism for 'People's right to know'. Set up district level monitoring committees augmented by increasing public awareness.



Haphazard growth	Set up interdisciplinary committee of experts to clear location of all chemical industries, even in respect of existing estates to evaluate pollution load and recommend remedial measures.
Weak enforcement agencies	Strengthen law enforcement agencies with trained staff and state-of-the-art facilities to tighten implementation.
Industries do not maintain	Train and motivate people within industries to meet and standards: maintain standards.

### **ACTION PLAN:**

[A] Set up interdisciplinary committee of experts to focus on:

1. Location of new chemical sites
2. Analysis of pollution load in existing estate and recommend remedial measures, including a master plan to upgrade infrastructure for collection, treatment, conveyance and disposal of waste.
3. Formulate comprehensive Disaster Management strategies.
4. Draw up recommendations for incentives for pollution control e.g. Grant 'industry status' to all pollution control projects, make land available for CETPs, soft loans, etc.
4. Identify, screen, validate and demonstrate effective in-process and end-of-pipe waste minimization technologies and processes.
5. Draw up a plan to encourage R&D for recycling, reduction, recovery strategies.
6. Draw up a plan to establish new industries which support these measures.
7. Establish a pool of experts from industry, academia and R&D institutions to bring awareness of state-of-the-art approaches, and validate technologies and procedures for carrying out EIAs which integrate local considerations.

[B] Set up District Level Monitoring Committees in every District.

### **3-B: FORESTS AND WILDLIFE**

#### **OBJECTIVES:**

To conserve existing natural resources including forests, wildlife, marine resources and fragile ecosystems while contributing to overall growth and progress of Gujarat.

#### **BACKGROUND:**

Development projects have major impacts in disturbing fragile eco-systems including forests, coastal, marine, village and agricultural eco-systems.

#### **PROBLEM**

1. Depleting green cover
2. Low community participation

#### **RECOMMENDATIONS**

To increase green cover from the existing 10% to 20% in 5 years.

Increase participation of local community and NGOs in preservation of natural resources.

3.	Biodiversity being destroyed diversity	Evolve a strategy to conserve bio- in its natural habitat
4.	Great environmental damage being caused by developmental projects	Enact rules to ensure alternative remedial strategies are in place before projects are undertaken
		Proactive planning for (a) mitigating environmental impact of development projects: (b) ensuring downstream benefits flow to affected communities recover social costs
	Destruction of green cover due to urbanization	Undertake greening efforts in revenue and other rural, urban, public & private lands also.
	PA formalities not complete	Complete formalities involved in all PAs in Gujarat and ensure boundaries are adequately marked.
	All eco-systems don't have PAs	Ensure remaining eco-systems have PAs.
	Community Development: strategies not evolved	Evolve development strategies for communities around PAs, including eco-development measures, strategies for use of minerals near PAs, etc.
	Unorganized ad hoc measures	Integrate indigenous practices and validate mechanisms through appropriate measures.

### III. ENVIRONMENT AND AFFORESTATION

N.M. Pandya\*\*

#### (a) Environment

The group was deeply concerned with the problems arising out of growing threat of pollution, primarily the pollution associated with rapid and haphazard industrialisation and particularly the concentration of chemical industries in Gujarat. However, the group was also unanimous in holding a view that there is no conflict between environment and development. In other words, the problem of poverty would become even more acute without industrial development and that it is possible to develop industries without damaging the environment. At the same time the group felt that the problem should be attended to on an urgent basis.

#### Objectives

To control industrial pollution and develop effluent treatment system and maintain purity of water and air.

- (1) Disappearance of value based life (i.e. living with consideration for others - for animals, trees and also for the generations to come). This kind of neglect for others is particularly evident for the last 15 to 20 years. Environmental loss - in this broad sense, is our most basic problem. Pollution is thus loss of the quality of life.
- (2) The intensity of pollution in different parts of the state, especially the chemical industry zones, has been increasing continuously and has now reached to a hazardous level in some areas.
- (3) The industries have been established in a haphazard manner without much prior thought being given to their possible impact on environment.
- (4) There is hardly any land use planning.
- (5) Public awareness about creation of pollution is rather low and spread of public awareness is nobody's responsibility in the political system from the state level down upto the village level. We, therefore, find emergence of ugly vested interests.
- (6) There is a complete absence of a policy for the optimum use of natural resources.
- (7) The problem of environment protection becomes more difficult with migration of labour from other centres. This gives rise to slums and accompanying filth.
- (8) And lastly, people have become more passive and less involved in the development process.

#### Recommendations

- (1) Environment protection should become once again a way of life as was the case in the past. Government and NGOs can take up this major challenge. It should be inculcated among children from an early age.

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\* Report of the District level meeting held on 2-5-1997 at Bharuch.  
(List of participants is given in Appendix-1)

\*\* Department of Economics, M.S. University of Baroda, Vadodara

- (c) B.Ed. and M.Ed. courses have no training for primary education, so primary school teaching is considered inferior.
- (d) Very low salaries
- (e) Very young age of entry (i.e. after 10th standard) as teachers.
- (f) Not much of a scope for professional growth
- (g) Teachers involved in mid-day meals and students spend time in going to nearby areas to get clean water for washing vessels.
- 6. (a) District level teachers know about MLL but municipal and private school teachers are ignorant about it.
- (b) Lack of monitoring of various training programmes
- (c) Non-availability of relevant data on literacy, enrolment and drop out rates at district/ block and panchayati raj levels.
- (d) Poor maintenance and renovation of school buildings.
- (e) Resource centres do not have financial and other autonomy.
- 7(i) a. Co-ed schools at primary level in villages/tribal areas.
- b. Male - teachers
- c. Low - female literacy in rural areas
- d. Household duties and looking after younger brothers/ sisters
- 7(ii) a. Low literacy and lack of awareness of parents.
- b. Extreme poverty leading to child labour
- c. Migration of parents
- d. Unfamiliar language and irrelevant syllabus
- e. Teachers using children for their personal work
- f. Gloomy and not clean schools
- g. Poor motivation of teachers.
- h. Diarchy on account of government administration on one hand and decentralisation of political system on the other. This results into increased interference of elected leaders.

### Recommendations

- 1. a. Relieving teachers from duties other than teaching and examination.
- b. Improved infrastructural facilities to be provided to teachers.
- 2. Provide urinals, toilets etc. in schools. Provide clean environment.
- 3. a. Provide more opportunities for refresher courses
- b. Improve infrastructural facilities.
- c. Special textbooks to be prepared keeping in mind the regional dialects.
- d. Every school must have a library where charts, maps, educational toys and newspapers are available.
- 4. a. Make education more relevant and need-based
- b. Non-uniform syllabi depending on local language and situation.
- c. Improve teaching facilities in schools.
- d. Improve attendance of teachers.
- e. To take the services of retired teachers and unemployed rural youths

- (2) However, the whole problem should be seen in a proper perspective. Pollution would come inevitably with modern industrialisation and for this reason alone, further industrialisation cannot be stopped. The problem cannot be posed as economic development or pollution. Economic development and industrialisation must take place to tackle the problem of poverty and starvation. The central issue is - how to keep pollution at a manageable level as is achieved in the developed countries. In the immediate short run and even during the medium term, pollution has come to stay and its solution should be attempted.
- (3) The state government should undertake systematic land use planning and should be able to indicate and decide, keeping the long term requirements in view, how the available land is to be used for crops, forests, factories, schools, dispensaries, etc.
- (4) While it may not be economically feasible to either close down or shift the existing factories, the haphazard growth of new industries must be strictly stopped. We just cannot afford to continue to make mistakes any longer.
- (5) At the level of the State Government, serious exercise must begin about the economic pricing of resources - for land, water, electricity, gas, petrol, mineral resources etc. To the extent that some of these issues fall within the jurisdiction of the Union Government, these issues should be taken up with it. In any case, serious economic studies should be undertaken.
- (6) District-wise study should be undertaken regarding its capacity for sustainable development. Further industrialisation in the state should be allowed only after obtaining sound idea about the environmental picture of the state.
- (7) Existing industrial units, causing pollutions should be forced to implement effluent treatment within a given time frame and common effluent treatment plants should be urgently undertaken with technical support from the state.
- (8) The state government receives large revenue from the industrial sector through taxes. A reasonable part of it should be spent on pollution control effort. If this needs to be supplemented, then a special pollution control tax or environment protection tax should be levied on the industrial units and a large fund should be created for the specific objective of environment protection. A decisive dent should be made on the problem of pollution control, by collecting a sizable amount through a specific tax proposal for the industries in Gujarat. Apart from reducing pollution, this should finally set at rest the unpleasant controversy of economic interest of industries to be detrimental to the overall interest of the people of the state.
- (9) As far as possible, industrial units should absorb local people if necessary, by giving them some skills through training. This is not to invoke "The sons of the soil" argument, but to check the growth of unhealthy slums which come in the wake of migrant labour. Ankleshwar industrial estate has solved the problem of unemployment within the radius of 50 kms. without giving rise to slums.
- (10) The state government divides its plan outlay among different sectors. In order to achieve the objective of tribal development, there is a tribal component in each sectoral plan. A possibility of a similar "Environment Component" in each such sectoral plan should be examined.
- (11) There should be at least three sites for a proposed industrial unit. After having considered all aspects, the final selection of the industrial site should be made.

## **(B) Afforestation**

### **Objective**

To increase the area under forests and thus to restore equilibrium in environment.

### **Problems**

- (1) With the increase in population and increase in urbanisation, deforestation has taken place.
- (2) There is large scale felling of trees in the forests.
- (3) Use of chemical fertilizers has also adversely affected the growth of trees.
- (4) There is a serious problem of degraded forest land.

### **Recommendations**

- (1) The whole problem of degraded forest land should be studied in detail. It has many dimensions - one such dimension is the conflict between tribal people and state government. This should be studied most objectively, without ideological predictions, on an urgent basis.
- (2) Having done this, the use of the degraded forest land should be undertaken on a scientific basis. Selection of different species of trees should be carefully done, preferably by women folk as 60% of the rural women are associated with agricultural work.
- (3) The question of bio-fertilizers should be studied.
- (4) The schemes of the forest department should be re-examined, in the light of what they have achieved over the past few decades. Similarly, the problem of developing new forests on degraded forest land should be examined - whether this is to be treated as reserved forests and should be left only to the Forest Department or whether there is a scope for its more profitable use through people's participation.
- (5) In urban and semi-urban areas, there is lot of land available for growing trees - for example - in large amount of land covered by government offices, colleges, schools, universities, hospitals - to name only the few. Whether we can devise some scheme of incentives to grow many more trees at these places should be examined.

### 3. ENVIRONMENT & AFFORESTATION

V.V. Modi\*

#### Objectives

The land is not inherited from our forefathers, but is borrowed from our children. Hence conserve and preserve the environment for the future.

#### Background

The ecosystem is being abused, polluted and made unfit for man's existence due to reckless and irresponsible attitude of industrialists and urban people. The industrial effluents and the domestic waste are being dumped into rivers and wastelands. This makes the water and land non-usable, threatening living species, and microorganisms.

#### Problem

- [1] Taking steps against polluting industrial units

#### Recommendations

- i. Punishment, penalty and imprisonment.
- ii. Closing down polluting industries, unless they establish and operate the effluent treatment plants.

#### Problem

- [2] Conservation of quality of water and air

#### Recommendation

Allow industries to let their treated effluents directly flow into sea through channels.

#### Problem

- [3] Social afforestation

#### Recommendation

All organisations - industries educational institutions, government offices, etc.- should plant at least 20 trees and there should be a follow up to monitor their growth.

#### Action Plan

##### [1] Short - term

- i. Complete monitoring of industries by committees, having representation of government officials, NGOs and experts in the field. The vigilance should be done continuously.
- ii. Recharge of rain water into ponds and wells.
- iii. In urban areas, the housing societies should plant trees. In rural areas the whole responsibility should be given to village people.

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\* Department of Microbiology and Bio-Technology Centre, M.S. University of Baroda. Chairman of the Modi Committee, President of Soclean. Soclean is NGO based at Baroda working for protection against pollution.

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**[2] Medium term**

- i. The industries should have system of efficient and modern effluent treatment. After treating the effluents, it should be directly dumped into sea through channels.
- ii. Government should stipulate a minimum limit for the ground water use.
- iii. There should be a follow-up that the planted siblings are grown.

**[3] Long term**

Once the short term and medium term actions are properly implemented, there should not be any problem faced in the long run.

**Resources Needed**

The resources should be financed by the industrialist. Because they have earned quite a lot and polluted the environment in the past and continue it in the present.

**P. Geetha Rani\***

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\* *Lecturer in Economics, Economics Department, M.S.University, Baroda.*



**Objectives**

Development should be without destruction Producing environmentally friendly processes and products. Waste in all forms, is to be regulated and should be converted into lay - products to the maximum extent, so that the final treatment of pollutants becomes simpler.

**Background**

The rapid and intense industrialisation, urbanisation, over-use and depletion of natural resources lead to destruction of the natural ecosystem. This contributes to the degradation of the environmental quality. The industrial effluent and sewage are not properly collected, treated and disposed off.

**Problem**

- [1] Lack of human effort in afforestation projects, mechanical, rigid and unrealistic planning.

**Recommendation**

- [i] People's participation is a must.
- [ii] Create awareness among the general public by employing social workers.

**Problem**

- [2] Should have intensive plantation and not extensive figures.

**Recommendation**

- [i] Targets should be decided by the concerned officials at the regional and sub-regional level.
- [ii] Follow-up of planted saplings is very much essential.
- [iii] Plantation should be realistic, based on the available resources, like, land, water, manpower and management.

**Problem**

- [3] Lack of ethical values of the officials.

**Recommendations**

- [i] Make them self-disciplined.
- [ii] Accountability and transparency in the functioning of officials.

**Problem**

Polluting industrial units must be given severe punishment.

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\* Gujarat State Fertilizers and Chemicals Ltd., [GSFC], Fertilizer Nagar P.O. 391 750, Vadodara District. Doctorate in Agricultural Science, former editor of the Journal Kreshijeevan, GSFC, Baroda. Attached to Swadhyay movement.

## **Recommendations**

- [i] Complete vigilance by the Pollution Control Board.
- [ii] People's awareness and participation against pollution.

## **Action Plan**

### **[i] Short term**

Voluntary supervision by the honest and sincere social workers instead of government staff.

The NGO - Swadhyay Movement by Pandurang Shashtri and the like should be given some responsibility and involvement.

### **[ii] Medium term**

Waste land utilisation by giving on lease to individuals like agricultural landless labourers (for them government should also provide loan and business organisation).

The share can be worked out from the profit they earn out of afforestation.

### **[iii] Long term**

People's awareness and participation.

## **Resources Needed**

There are already sufficient resources pumped into the government sector. What is needed is efficient utilisation of the resources by honest team of managers.

**P. Geetha Rani\***

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\* Lecturer, Economics Department M.S. University of Baroda.

**Objectives**

Preventive steps to stop against pollution, development of supportive system.  
Participation of NGO and women in pollution abatement, and management of sustainable environment

**Background**

To stop pollution hazard to the people.

**Problems**

Funding of anti pollution projects.  
Shifting of industry from city area.  
Management of water, air and noise pollution

**Recommendations**

Make industry responsible for meeting environment norms.  
Industrialisation: set up organisation to plan and demand alternative location.  
Educate to people in society for management of water, air and soil resources.

**Action Plan****[1] Short term (2-3 years)**

Effective execution of Environment law licensing authority should be strict.

**[2] Medium term (5 yrs.)**

State Govt. in each state to formulate environment standards in society.

**[3] Long term (10 yrs.)**

Prepare a perspective plan of pollution free Gujarat by institutions and the Industry Department.

**Issues**

1. What are the present problems of pollution in Saurashtra vis-a-vis Gujarat ?
2. How to tackle environmental problem without government support ?
3. Which kind of legal framework is to be developed to execute environmental policy effectively?
4. What kind of innovative role can be played by NGOs like yours ?
5. What are your suggestions for environment preservation for sustainable growth ?

**Recommendations**

1. We have problems relating to water, air and noise pollution in Gujarat mostly arising from industrial activity. Different industries, like, textiles, chemicals and petrochemicals are affecting human and animal life. Those who create pollution are not willing to pay for a viable environment.

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\* Secretary & Trustee, Hind-Swaraj Mandal, Rajkot.

2. It is difficult to tackle environment project without Govt. support. Industries' organisations/ associations, and pollution boards will have to find out ways and means to tackle the problem. Schemes and plans should be prepared by them in order to ensure their successful execution. However, grants from UNDP, UNO, ILO would be vital to prepare schemes and execute them.
3. There is legal framework provided by Commissioner of Industries regarding punishment and penalty for violating rules and code of environment. But this is not properly executed by officers of the government. Interference from political leaders also influences the outcomes. Local self-government can enforce additional provisions in this regard.
4. NGOs can play a vital role for sustainable environment in Gujarat. Management of social forestry alone cannot tackle the problem of pollution. Concerted efforts are required for preparing plans, and schemes to get funding for meaningful execution. All NGOs should be invited to tackle the problems of environment in Gujarat and to prepare plans and schemes.

### **Suggestions**

1. Each NGO should prepare a scheme to tackle the problem of pollution.
2. Awareness education at school, high-school and college level.
3. Imposing environment-cess on industry to raise funds for anti-pollution projects.
4. Pollution free houses for poor people living in slums.
5. Health Department should be associated to help those who have been affected by water and air pollution.
6. Preparation of schemes by Government and Industries Department for pollution abatement.

**B.M. Jani\***

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\* Reader in Economics, Saurashtra University, Rajkot-5.

J. M. Trivedi\*

### Objectives

- To conserve natural habitat and bio-diversity.
- To check pollution effectively.
- To improve resource management and utilisation.

### Problems

- Degradation of natural habitat - both land as well as aquatic.
- Loss of bio-diversity.
- Poor and wasteful resource utilisation.
- Poor environment management
- Ineffective regulation and lack of coordination between various agencies working in this area such as Gujarat Industrial Development Corporation, Gujarat Industrial Finance Corporation, Gujarat Pollution Control Board etc.

### Recommendations

- Better coordination between various authorities can be achieved through regular inter-departmental meetings and meetings of the concerned agencies.
- We should think locally rather than borrowing foreign technologies in various fields. This will help us in maintaining proper balance of bio-diversity. Technologies suitable to our environment and bio-diversity be developed.
- Natural resource utilisation planning should be adopted in detail.
- Population growth should be checked.
- Poverty is also a great danger to environment. Therefore poverty removal should be our first on agenda.

### Action Plan

#### Short term

- Take suitable measures so that laws relating to pollution control are effectively enforced.
- Create political consciousness in the area of pollution control and environmental protection so that the measures are unanimously supported.

#### Medium term

- Environment monitoring agency be established.
- Environment resource data bank be established.
- Role of NGOs be increased in this area.

#### Long term

- Environment education plan be adopted. In the long run educating people is the sure way to achieve the above objectives.

Bharati D Dave\*\*

\* Reader in Economics, Department of Economics, Bhavnagar University, Bhavnagar.

\*\* Head, Dept. of Microbiology, Sir P.P. Institute of Science, Bhavnagar University, Bhavnagar.  
Also associated with Centre for Environment Education and Gujarat Ecology Commission.

## Objective

- To conserve and protect environment.
- To prevent advancing salinity ingress in coastal regions of Saurashtra.
- To enforce laws for conservation of forests and to launch mass movement for tree plantation throughout the state during monsoon months.

## Background

Gujarat has forest coverage which is less than national average. Rapid industrialization, urbanization plus rapid increase in chemical industry units, absence of drainage facilities and of waste management practices in cities, unregulated traffic etc. create serious problems of environment.

## Problems

- People by and large are ignorant and unaware of the problem.
- Only a few effective measures taken for preservation of environment and afforestation.
- Totality of problem yet ignored by Govt. and people. Salinity ingress increasing, water table declining.

## Recommendations

- Spread environmental education and literacy.
- Strengthen and expand Govt. machinery and make it performance oriented.
- Pollution Board's studies be given full publicity, set up district offices of Board, form effective forest preservation committees with powers.

## Action Plan

### i. Short term (2-3 yrs)

- Movement for public awareness and taluka-wise target for tree plantation.

### ii. Medium term (5 yrs)

- Regulation of polluting industries, plantation of medicinal plants.

### iii. Long term (10 yrs)

- Cover all barren lands by forests, revise forest policy, make it adequate, implement effectively.

## Resources needed

- Increase budget allocation, enlist peoples' active co-operation in all villages, towns, cities, form "friends of trees groups" in all institutions and offices etc.

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Tushar Harjivandas Chandarana\*\*

\* Lecturer in Journalism, Amreli.  
Youth leader with commitment, environmentalist, spreading awakening among rural masses for preservation of nature.

\*\* Professor of Economics, Amreli.

**Objectives**

- To awaken people about the need for conservation of total environment.
- To grow trees/forests on 50% of barren lands in 10 years.
- To grow medicinal plants in forests, form / encourage "Tree Lovers Societies".

**Background**

Gujarat has awakened now - progress slow. Chemicals and other industries pollute air, water, land etc. Social forestry successful, yet gaps and deficiencies exist.

**Problems**

- Increasing pollution on account of industries.
- People ignorant about the need for conservation of environment.
- Forest coverage highly inadequate.

**Recommendations**

- Anti-pollution devices/equipments to be compulsory.
- Media-print as well as electronic educational institutions etc. be encouraged/assisted.
- Tree plantation everywhere. Yearly progress to be observed.

**Action plan****i. Short term (2-3 yrs)**

Set up peoples' committees every where with functions, powers and resources.

**ii. Medium term (5 yrs)**

Target 25-30% forest coverage in 5-10 years. Movement for pollution free talukas and districts be launched.

**iii. Long term (10 years)**

Select 500 young people in each taluka. Assign land for tree plantation. Pay for each developed tree, make them owners.

**Resources Needed**

Unemployed young people be encouraged to adopt land for tree plantation, tap global resources, NRIs.

**Subhashchandra Shankarlal Nayee\*\***

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\* Social activist and medical practioner. Doing regular social work under Swaminarayan Sampraday.

\*\* Lecturer in Psychology.

Dr. Devid\*

### Action Plan

#### Long Term (10 years)

1. Improper government policy with respect to industrial expansion
2. Complete scrutiny before according permission.
3. Pollution causes ecological imbalance.
4. Pollution is causing health hazards.
5. Pollution Control Board inefficient, ineffective.
6. Environment education should be an integral part of curriculum right from the school level, upto college as well as research level.
7. There should be proper co-ordination between policy makers on industries and Pollution Control Board.
8. Emphasis on social afforestation to protect indiscriminate felling of forest wood.
9. Forest tracking should be encouraged to enable students to have close scrutiny of ecological check and balance.
10. Proper education on wild life protection and its effect on general life.
11. Voluntary organisations or NGOs should be involved to impart training to small group at village as well as town level regarding pollution control and necessity of enforcing laws.
12. Local government and panchayats can be empowered to keep close vigil on industrial or pollution causing activities.

Ajay Naik\*\*

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\* Director, Jay Research Foundation.  
Research scientist, expert in pollution control.

\*\* Lecturer, Rofel College, Vapi.



**Interview : 3.8**

**B. G. Vashi\***

**Action Plan**

1. Pollution causing industries should be closed right now to enable environment to attain balance within 10-15 years.
2. Effluent treatment plant compulsory.
3. Industries should share its profit in protecting environment.
4. Autonomy to Pollution Control Board for effective role.
5. Social afforestation be emphasized.
6. Public awareness through voluntary organisation.
7. Stress on medicinal plantation.
8. Forest life should be protected.
9. Forest cutting, air and noise pollution are causing low fertility rate among tigers.
10. Afforestation prevents soil erosion and brings desertification under control.
11. Long term measures should be adopted.

**Ajay Naik\*\***

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\* *Agricultural University, Navsari.  
Agriculture scientist and expert in forestry.*

\*\* *Lecturer, Rofel College, Vapi.*

### Problems

- a) There is lack of coordination between the bureaucracy and the forest officials. Most of the agencies involved in town planning and district development function in isolation of the forest department.
- b) The non-participatory and non-consultative attitude of the bureaucracy is quite in contrast to the prospective programmes like the Joint Forest Management, which are participatory and consultative in nature.
- c) The Social Forestry has failed because there is no tradition of management (protection, fresh plantation etc.) Village people have not been involved.
- d) The problem of degradation, illegal felling of trees etc. is caused due to the interaction of the locals with the outsiders. This can be minimised by the locals jointly managing the forests with the forest officials.
- e) The society is not serious about the implications of the degradation of forests and environment.

### Recommendations

- 1) Administration: Most of the government bureaucracy that is charged with implementation operates in a decidedly non-participatory and non-consultative fashion. Bureaucratic regulations like the release of budget, physical targets, development of the plans, all act against the more flexible and adaptive process needed to successfully implement a programme like the joint forest management. This can be changed through appropriate training, through innovative courses involving NGOs, National NGOs, National Forest Academy, and the Bureaucrats. There is need to change the curriculum by incorporating social skills and by changing the silvicultural and administrative concepts.
- 2) Legal Issues: Status of Village Committees. The state government resolutions recommend village level committees as functional groups. However, these do not have legal and statutory basis, and it may be difficult for them to manage resources on long-term basis. The relationship of the state government with the statutory village panchayats needs to be sharply defined.
- 3) State Forest Policy has to be in tune with the National Forest Policy. Keeping in tune with the new policy, species choice, and silvicultural practices will perhaps need a change in favour of usufruct based trees and multiple outputs. Where a large number of people have claims on forest produce, low management and low value output (but high bio-mass) solutions have perhaps a better chance of success.
- 4) Social forestry shall get uplift if heavy plantations take place by the canal sides, farm boundaries, and common land.
- 5) Involvement of the NGOs, social organisations, religious leaders, schools and educational institutions is needed to create a long term wave of awareness regarding the problem.

S. Srinivasa Rao\*\*

\* Indian Forest Service, Conservator of Forests, Surat.

\*\* Department of Economics, South Gujarat University, Surat.

N. J. Mistry<sup>1</sup>  
Devendra Naik<sup>2</sup>  
Nagin<sup>3</sup>

### Basic problems

- a) Rivers in south Gujarat at present are unable to absorb any more industrial effluence. There is no automatic absorption/decomposition of the industrial and municipal effluence.
- b) The dyeing industry charge the bore-wells with the industrial effluence, leading to gross violation of environmental norms and pollution of underground water resources.
- c) Most of the pollution by the textile industry is water based, i.e. more water is being used not only in the dyeing process but also in the printing process.
- d) Installing the pollution control instrument is not costly per se, but the basic problem is of the commercial returns on the same, which prevents the industry and the dyeing units to adapt to pollution control devices. The industry has nothing to gain in terms of monetary or volumetric returns, unlike an energy saving device where the returns are instant.
- e) Though there has been technology to prevent water pollution by the dying industry, there is hardly any technology to do the same in the printing industry.
- f) The problem of air and water pollution exposes the society to risks of skin and chest diseases.

### Recommendations

1. Most of the dyeing industries should use the technology which shall bring down the usage of water at different stages of dyeing and printing. The technology does exist. This would, when put in use, bring down the usage of water by 70 to 80 per cent. This would mean a huge benefit in terms of environment, energy, and financial resources.
2. A thorough review of the existing feasible technologies that would be responsible for reducing the pollution in the dyeing and printing process in textile industry should be entrusted to a high level committee involving right persons, instead being headed by a bureaucrat who in turn may create more problems:
3. A total environment management network has to be established which would go into the organization and implementation of the environmental norms. This may include the environmental audit of the area, and treating environment as an national resource which should be accounted for in the national income analysis. This should go a long way in creating a long-wave of awareness in the society.

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1 Assistant Professor, S.V.R. Engineering College, Surat. Expert in Estuarine Pollution, Research Papers in Environmental Engineering.

2 Chairman and Managing Director, Devrekha Engineering Ltd, Sachin. Has won over 27 awards for his products for textile industry. These products are supposed to be pollution controlling, and energy saving.

3 Retired, Department of Chemistry, S.V.R. Engineering College, Surat- 7. Actively involved in promoting the cause of protecting the environment. He has to his credit over 20 research papers. Currently, associating with the voluntary association, "VASUNDHARA", which is responsible for creating environment awareness among the people.

4. Solid waste management has to take place seriously. In Andhra Pradesh garbage is used to create electricity. In Delhi it is used to provide fuel to the residential complexes. In Baroda fuel pellets are produced by the private agencies, this is done by buying garbage from the Corporation and the product is sold at high profit.

These are some of the instances which not only solve the problem of garbage in the urban areas, but also provide much needed financial resources to the Municipal Corporation.

Every housing colony which has over a particular number of units should compulsorily have a plan for compost plant. The Gujarat Housing Board while planning housing complex can plan for the same.

5. Apart from all these, it is high time, the government machinery enforces norms of environmental laws strictly. Unless the law enforcement agencies are strict, nothing can happen. If possible independent private agency may be assigned to monitor the compliance of the existing environmental and pollution norms. The modus operandi can be worked out with the government.

**S. Srinivasa Rao\***

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## ISSUES IN DISASTER MANAGEMENT, MITIGATION AND PLANNING

Rohit Shukla\*

### 1.0 Introduction

Disasters are identified as occurrences which have dramatic and traumatic effect on large number of people. Disasters are characterised by the following:

- a. The occurrence is sudden. Disasters like earthquakes, for example, last only for a few seconds.
- b. There is a wide spread effect on the people. The effects are in the form of loss of life, public property, and private livestock.
- c. Disasters could be natural or man-made. Droughts, floods, earthquakes, landslides, tsunami, volcano eruption, etc. are natural disasters. Incidents like fire, stampede, industrial disasters like that of Bhopal gas are instances of man-made disasters.
- d. It is not always easy to distinguish events leading to disasters as purely natural or man-made. Dam burst of Machhu-II is an example of disaster which was both natural as well as man-made.
- e. Disaster is also characterised as a situation in which local resources and efforts are found to be inadequate in rehabilitating the people. Examples like cyclone of A.P. in the year 1996, Earthquake of Latur, Gas tragedy of Bhopal, etc. could be cited as examples where international help was of considerable importance.

### 2.0 Nature and extent of damage and loss

It is usually observed that all disasters lead to widespread losses. However, disasters like flood, earthquake, etc. hardly discriminate between rich and poor or rural and urban. In case of Latur, highest casualty was in the upper income group. Yet, disasters like droughts affect adversely only poor people. Yet, in a geographically specific location, for most of the disasters, the poor are the most vulnerable.

### 2.1 Poor are more vulnerable

There are many reasons behind this situation of high vulnerability for the poor. They could be accounted as follows:

- a) Their houses are constructed in the river-beds, very near the sea-cost, or other low lying areas. Thus they suffer the most at times of floods and cyclones.
- b) They are assetless. Thus their capacity to withstand a disaster is extremely limited. This makes them vulnerable to indebtedness and high interest rates.
- c) Their social and political leverage is very meagre. Besides, their capacity to articulate and press for their felt needs is also minimum. This is also witnessed at times, during the relief phase. The poor sometimes fail to press for an receive necessary relief.

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\* Professor of Economics, Sardar Patel Institute of Economic and Social Research, Thaltej, Ahmedabad.

The author is also invited by the Government of Gujarat to work as Faculty in charge of the Disaster Management Cell at Sardar Patel Institute of Economic and Social Research. This cell is sponsored by Govt. of India and WHO to conduct workshops on Disaster Management for officers of states of the western region.

## 2.2 Disasters are more devastating in developing countries

Natural disasters can occur at any place in the world. However, certain areas are more vulnerable and prove to any specific type of disaster. For example, in case of Gujarat, districts like Kutch and Banaskantha are arid. All districts of Saurashtra, except Junagadh, are drought prone. Similarly Veraval and Valsad coasts are cyclone prone; while country like Nepal is prone to earthquakes, floods and land slides.

However, though cyclones may visit Andhra and West Bengal coasts and also the Florida State in U.S., impact on people in the developing world is more serious. There are a few reasons behind this:

- a. The developed world is keen to learn its lessons. It can afford to spend time and special resources for the purpose.
- b. Perhaps the best part of the human endeavour in meeting the crisis lies in exercises leading to proper planning against disasters. Thus, in relative terms, their residential areas as well as industrial units are more safe. Their communication network is more dependable. Their public warning systems are more effective. The response time for the government as well as social action groups is very less. All these lead to much less damage and loss of life in the developed world as compared to the developing world.
- c. One reason that distinguishes developed world from the developing one, in terms of occurrences of disasters lies in the area of environmental degradation. The world has large number of "environmental refugees". It is estimated that there are about 10 m. environmental refugees in the world; of this about five to ten hundred thousand are in Nepal alone.

Floods, land slides, silting and soil erosion are even caused by environmental degradation. It can also be seen that environmental improvemental degradation. It can also be seen that environmental improvements can help in mitigating the impact of certain disasters. For example, a mangilove belt can greatly reduce the velocity of cyclonic winds. Thus a shelter-belt type of plantation say, on the Veraval cost-line can help in reducing the impact of cyclonic storms.

- d. Social order, sensitivity and awareness of the people also account for differences in effects of a given type of disaster between developed and the developing world. This, the tele-communication network in the developed world is more effective vis-a-vis that of ours. There are many more Ham Radio operators than in our country. As the recent floods (July 1997) of Gujarat have shown, we are no less to any in the world in terms of humanitarian compassion and self-less action, it seems, we are either ill-equipped or less prepared to effectively meet the challenge.

## 3.0 Issues in Planning and Mitigating Disasters

It must be accepted at the outset that natural disasters are unavoidable. Human effort lies in contemplating steps that can minimise the adverse effects. In this light a few steps are enumerated below:

- a. Undertaking studies of disaster prone areas with a view to finding out extent of vulnerability and types of risks associated with specific disaster.
- b. Organising awareness camps for a cross section of social action groups as well as government officials of concerned departments so as to work out a plan of action. In order to test the efficacy of such plans, mock drill may also be conducted.

- c. Establish and maintain an alternate system of communication network. Ham radio is an important segment in this context. However, its present cost of Rs.60,000/- is prohibitive; it should be brought down to a manageable limit.  
At taluka level ham clubs may be established. If funds for this are not available from other sources, the guidelines for the use of MLAs' and MPs' funds may be suitably modified for the purpose.
- d. Rehabilitation of the affected people and area need not be divorced from other development programmes. Thus the Drought Prone Area Programme (DPAP) need not remain public works, involving 'digging pits and filling them up'. Programmes like afforestation, JRY, Indira Awas Yojana, etc. can be suitably modified so as to include rehabilitation programmes as and when the need arises.
- e. Besides, the planning process itself needs to be consensitised from this point of view. This, while school buildings are constructed necessary components like drinking water facility, latrines, communication, etc. may be provided with a view to converting them into relief camps.

In the same vein, while preparing district and micro level plans careful attention should be paid to build up infrastructure for mitigating impact in disaster prone areas.

**John Noble Wilford\***

Now, many scientists think they have a better idea. Instead of struggling to make the desert fit for conventional crops, they are trying to domesticate a number of wild desert plants with economic potential and learn how to cultivate them on a large scale with little or no irrigation.

Dr. Edward Ayensu, chief botanist at the Smithsonian Institution, states that efforts to domesticate desert plants stem from "the realization that it's in our best interest to diversify the plants we depend on, to expand our botanical horizons.

Dr. Jack D. Johnson, director of the Office of Arid Lands Studies at the University of Arizona states that cultivation of new crops native to the desert should reduce demands on scarce water supplies; perhaps help reverse the global trend of arable land being lost to desertification and provide alternative sources of rubber, fuel and high protein food and forage.

Based on research at the University of Arizona, a leader in arid-land agriculture, and on research at other institutions in this country, Mexico and Israel, several obscure plants could soon emerge as important commodities. Guayule, for example, a source of high-grade natural rubber. Jojoba, a shrub whose peanut-size bean contains a valuable oil that could save the sperm whale from extinction. Euphorbia, whose milky sap is a hydrocarbon similar to crude oil. Buffalo gourd, a source of vegetable oil, high-protein flour and food starch. Halophytes, a protein-rich forage that thrives on salt water. Even the vagrant tumbleweed, which, if grown like hay, could be raw material for fuel pellets and fireplace logs.

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\* *Reprinted with thanks*



## 4. WATER AND SANITATION

- (i) **Experts:** Dr. C.C. Patel  
Mr. P.A. Raj  
Mr. Utpal Sharma
- (ii) **Resource Persons:** Mr. P.K. Ghosh, ACS, UD&HD  
Mr. K.C. Kapoor, Secy. (WS) H&HD  
Mr. N.B. Desai, Secretary (Narmada) N&WRD  
Mr. B.J. Parmar, Secy, (WR), N&WRD  
Mr. A.K. Joti, (Secretary, HFW)

### OBJECTIVES

1. Achieve optimal and integrated water management including ground and surface water,
2. Prevent wastage of water and extend irrigation benefits to the largest possible areas,
3. Expeditiously complete on-going irrigation; schemes including Sardar Sarovar Project (on which large investments have already been made)
4. Provide moisture conservation and irrigation benefits to the dry areas in Gujarat which are deprived of irrigation water
5. Stop over-exploitation of ground water
6. Provide drinking water supplies and sanitation facilities to all the urban areas and villages in the state.
7. Encourage drip irrigation or sprinkler irrigation in especially water short areas, where such irrigation is feasible on fairly good relatively of say 60% or more.
8. Provide employment in the rural areas and ensure people's participation on a statewide scale.

### BACKGROUND

Present water development is more in piece-meal rather than under systematic master plan. What has become a limiting resource in the development of the State and is causing imbalance in the development of Saurashtra, Kachchh and North Gujarat vis-a-vis other areas.

Pollution is on the increase both from the distributed sources such as agriculture, and by point sources such as industries and municipal effluents. There is urgent need to extend irrigation facilities to the largest possible areas and prevent and control pollution of fresh water. Effective measures are required for prevention of waste of water and providing timely equitable supplies to farmers.

#### Problems

#### Recommendation

#### **Water Supply for municipal and industrial use:**

Urban/Industrial Systems, consumption and pollution

- \* Wastage in water distribution systems in urban areas should be reduced to one half.
- \* Large cities and developing urban areas should consider two pipe systems to carry treated and raw/recycled water separately.

	<ul style="list-style-type: none"> <li>* Treated water should be reused for irrigation and industries, with incentives given to Municipal Corporation for such use.</li> <li>* Water intensive industries should be located in areas where water is locally available, keeping in view safe disposal of effluents.</li> <li>* Industries should resort to latest technologies for reducing water use to the minimum.</li> <li>* Industries should bear full charges of supplies of Water.</li> <li>* Harnessing of rain water on roofs and its storage should be encouraged.</li> <li>* There is urgent need to set a high tech watchdog authority for monitoring quality of effluents and of river waters together with adjoining sub-soils. This agency should carry out research and testing and provide consultancy for effluent treatment and disposal.</li> </ul>
Inadequate sewage system	<ul style="list-style-type: none"> <li>* An outlay of Rs.10,000 crores is required to provide sewage treatment and disposal for rural and urban areas. Six corporate cities and 9 towns having more than one lakh population should be provided with these facilities at an additional cost of Rs.1800 crores.</li> </ul>
<b>Water for Irrigation</b>	
Inadequate use of technology	Future irrigation schemes in drought prone areas should be based on sprinkler or drip irrigation.
Inappropriate pricing/subsidy	Irrigation rates should be rationalised and raised to about 4 times the present level in annual steps during 9th Plan
Wastage of electricity	Programme of survey and improvement of efficiency of water pumping systems in rural areas should be undertaken for saving atleast 25% electrical power or diesel.
Waste of Water	Systematic programme of saving in irrigation water use in existing systems should be undertaken under strict monitoring of targets, ensuring warabandi systems and night irrigation.
Ad-hoc procedures	Policy and procedures including rules of allocation of water among drinking/Municipal supply versus irrigation should be decided and administered, through high level committees.
Water management systems does not have systematic involvement of farmers.	Farmers participation through volumetric supply and sale of water through farmers cooperatives should form integral part of water management.
Excessive mining of ground water	Recharge scheme should be undertaken
Water logging	<ul style="list-style-type: none"> <li>(a) Drainage system should be implemented.</li> <li>(b) Consumptive use of water of surface and ground water should be resorted.</li> </ul>

## **ACTION PLAN**

### **(i) Short term : (2-3 years)**

1. All ongoing irrigation schemes (except Narmada) having balance of outlay of Rs.110 crores should be completed by 1999 end.
2. State water policy should be prepared and approved within six months.
3. A master plan of water development and management including interlinking of rivers and dams should be prepared by 1999 end.
4. Ground Water Control Act should be brought into force immediately. Ground water recharge and micro water shed schemes should be implemented.
5. Irrigation Bill should be reintroduced and brought on the statute at the earliest.
6. Sardar Sarovar Project: Though the project is to be completed in early Tenth Plan, canals to carry water supply to Lakhtar, Maliya, Vallabhipur should be completed by December 1998. During 9th Plan, irrigation potential of atleast 9 lakh ha. should be created.
7. Before the dawn of 2000 AD, each "no source" village and urban areas should have access to minimum quantity of safe drinking water. Total plan for achieving the target should be prepared by end January, 1997 and implementation of remaining components started forthwith. Allocation of Rs.3500 crores for first three years should be provided.

### **(ii) Medium term (5 years)**

1. A statewide multi-disciplinary programme of micro water shed development should be formulated using hightech methodology after study of pilot projects (about 5 nos. in different districts) which should be planned and completed in 9th Plan.
2. Sardar Sarovar Project: during 9th Plan, irrigation potential of at least 9 lakh ha. should be created.
3. Low cost sanitation schemes should be continued with great speed covering 25% of the rural population in the 9th Plan.

### **(iii) Long Term (10 Years)**

Sardar Sarovar Project still needs Rs.14000 crores for completion. Concerted efforts be made to mobilise maximum resources and the project completed in early tenth plan.

## **RESOURCES NEEDED**

### **(A) Infrastructural Resources**

#### **1. Available :**

N & WR Department, Health and Family Welfare Department, SSNNL, GWSSB exist. There are inadequate both in capability and strength considering unprecedented programme of development and management.

#### **2. Needed**

- a) Water Management and Development Authority for transport and delivery of water needs to be created forth with.

- b) Restructuring the existing organisation and merging/addition of new disciplines such as electrical, mechanical, electronic, agriculture environment, etc.
- c) Watchdog authority for monitoring quality of effluents needs be created.
- d) Morale of personnel is very low preventing initiatives and dedication which are totally lacking. Departmental inquiries haunt most of them.
- e) A categorical declaration by the Government to the effect that all the decisions taken by individuals/groups in good faith will be ratified and no inquiry will be conducted unless malafide are suspected prima-facie.
- f) Procedure for approval of contracts shall be reviewed and rules laid down for ensuring transparency, expedition and economy.
- g) All on-going inquiries shall be completed within six months by continuous sittings.
- h) Create an environment in which each person as a team is able to put in the best.
- i) Merits shall be rewarded and dead wood/corrupt elements weeded out efficient persons shall man the fronts.
- (ii) Latest technology to be adopted.
- (iii) Five Year Programmes of training and placement of persons should be prepared for upgradation of skills.

## (B) FUNDS

PURPOSE	AMOUNT	POSSIBLE SOURCE
(i) Ongoing irrigation schemes	110 crores	Budget support/External Assistance
(ii) SSNL	14,000 crores	Budget/ Borrowings/ Additional Central Assistance
(iii) Safe Water Plan	3500 crores	Budget support/ Bilateral assistance/ Credit from International Institutions/ Local Institutional funds
(iv) Sewage system	10000 crores	Budget support/ Bilateral assistance/ Credit from International Institutions/ Local Institutional funds
(v) Micro water shed Programme - Pilot in short term - Full scale in long term.		Budget/Institutional Funds/ Credit from International Institutions
(a) Pilot Project	100 crores	
(b) Full Scale	Estimate Not available	

## IV: WATER AND SANITATION

Gokul O. Parikh\*\*

### Introduction

Water is the most precious natural resource, it is the basic requirement of men and animals, and hence a valuable national asset. Water exerts great influence on the quality of human life.

- Water resources in the state are inadequate to meet demand for household consumption, agricultural and industrial use.
- It is the uneven rainfall over time and space as also the unsatisfactory management of water resources which are largely responsible for the above mentioned situation.
- In a region where water resources are limited, its use should be prioritised to yield optimum benefits for (i) irrigation (ii) drinking water and (iii) industrial purposes.
- Water available from surface as well as ground water resources, which mainly depends on inadequate and uncertain rainfall required well-conceived water conservation measures.

### Objectives

The principal objectives of planning for water resources should be the following

- \* Irrigation facilities be provided to maximum possible area under cultivation in the state.
- \* Created potential irrigation be utilised to the fullest possible extent.
- \* Considerably improved water management efficiency requires eliminate waste of water, provide timely and equitable supplies of water to farmers, step up of water use and reuse, efficient conjunctive use of ground/surface water.
- \* Provide necessary moisture conservation and irrigation benefits to wide spread dry areas in various districts of Gujarat.
- \* Prevent and control pollution arising due to water use in agriculture and effluents released by industries/municipal water supply and drainage schemes.
- \* Ensure that ground water resources are not depleted due to over exploitation. Water is renewable but it is limited. Available water must be optimally harnessed and utilised with foremost attention on benefits arising from its use according to well-defined priorities.
- \* Assured access to minimum quantity of safe drinking water in every village, town and city.
- \* Prevent wastage of water both in distribution and consumption, particularly in the urban areas.

\* Report of the District level meeting held on 29-4-1997 at Sabarkantha  
List of the participants is given in Appendix-I

\*\* Sardar Patel Institute of Economic and Social Research, Ahmedabad

- (c) B.Ed. and M.Ed. courses have no training for primary education, so primary school teaching is considered inferior.
- (d) Very low salaries
- (e) Very young age of entry (i.e. after 10th standard) as teachers.
- (f) Not much of a scope for professional growth
- (g) Teachers involved in mid-day meals and students spend time in going to nearby areas to get clean water for washing vessels.
- 6. (a) District level teachers know about MLL but municipal and private school teachers are ignorant about it.
- (b) Lack of monitoring of various training programmes
- (c) Non-availability of relevant data on literacy, enrolment and drop out rates at district/ block and panchayati raj levels.
- (d) Poor maintenance and renovation of school buildings.
- (e) Resource centres do not have financial and other autonomy.
- 7(i) a. Co-ed schools at primary level in villages/tribal areas.
- b. Male - teachers
- c. Low - female literacy in rural areas
- d. Household duties and looking after younger brothers/ sisters
- 7(ii)a. Low literacy and lack of awareness of parents.
- b. Extreme poverty leading to child labour
- c. Migration of parents
- d. Unfamiliar language and irrelevant syllabus
- e. Teachers using children for their personal work
- f. Gloomy and not clean schools
- g. Poor motivation of teachers.
- h. Diarchy on account of government administration on one hand and decentralisation of political system on the other. This results into increased interference of elected leaders.

### Recommendations

- 1. a. Relieving teachers from duties other than teaching and examination.
- b. Improved infrastructural facilities to be provided to teachers.
- 2. Provide urinals, toilets etc. in schools. Provide clean environment.
- 3. a. Provide more opportunities for refresher courses
- b. Improve infrastructural facilities.
- c. Special textbooks to be prepared keeping in mind the regional dialects.
- d. Every school must have a library where charts, maps, educational toys and newspapers are available.
- 4. a. Make education more relevant and need-based
- b. Non-uniform syllabi depending on local language and situation.
- c. Improve teaching facilities in schools.
- d. Improve attendance of teachers.
- e. To take the services of retired teachers and unemployed rural youths

- \* Improve sanitary conditions in every nook & corner through low cost sanitation schemes, Pay and Use toilet schemes in cities and on state highways and through special measures in different tribal, forest and hilly areas.

### **Water Conservation & Water Management**

- Urgent need for improving and strengthening natural (such as rivers, tanks, village ponds) and man-made (such as dams, etc.) water storage structures.
- Each drop of rainy water need to be preserved by public and private agency through various devices such as "micro water-shed" strategy, constructing check-dams, preparing farm ponds, covering ponds by polythene sheet (with a view to eliminate seepage loss as experimented by an NGO "Utthan") as well as traditional methods of conserving water at household level as still prevalent in several places like Junagadh, Khambhat, etc.
- In areas of undulating topography, lift irrigation method may be promoted. Lift irrigation co-operative societies be formed on the line of Sadguru Water Development Foundation in Panchmahal.
- Instead of open field channel/flow irrigation, sprinkler/drip irrigation method is advocated and irrigation co-operative societies formed, wherever possible.
- Canal lining be properly carried out wherever necessary to prevent water seepage.
- Water supply should be on volumetric basis and farmers should be involved in adopting this method.
- Rationalisation of water rates for its use (for all purposes it is desirable to cover the unit cost of water supply).
- In order to minimise waste of water in urban areas, step are: recycling of water, installation of two pipelines separately for treated and raw recycled water, low water consuming and hi-tech industries be encouraged to reduce the water-consumption for industrial purposes. Policies should encourage water-intensive industries to be located in South Gujarat.
- Potable drinking water be provided on priority basis to the slum dwellers in large cities through execution of Slum Net-working Project funded by international donor agencies.
- Co-ordination between government departments and NGOs, on the one hand and inter-departmental co-ordination in the government on the other, is required to ensure timeliness, adequacy and quality of water supply.
- Water management efficiency needs to be enhanced by multiplying and improving the existing farmers' training programmes, preferably in a decentralised manner through the net-work of irrigation co-operative societies and/or with the assistance of interested NGOs, like SWDF, Dahod, AGAKHAN and ANARDE Foundations.
- For equitable and optimum use of irrigation water, Warabandhi and night irrigation be encouraged.

### **Administrative Aspects**

- Among the various administrative suggestions are the following:
  - i. Empanelment of approved parties for repairs and maintenance of various projects of irrigation departments.

- ii Enhancing the authorised limit of sanctioning expenditure, given to different levels of engineers years ago, in view of inflation and cost escalation.
- iii Deputation of engineers who are nearer to retirement should not be preferred for training and/or in-depth experience abroad. Instead, relatively younger engineers concerned with implementation should be deputed so as to reap intended benefits.
- iv Minor irrigation works be departmentally carried out with the help of selected personnel, instead of through contractors or agencies.
- v Need for improving users' consciousness through training, mobilisation and peoples' contribution in cash/kind so as to make them vigilant about use of water.
- vi Responsibility of maintenance of Individual Water Supply Schemes (IWSS) should rest with the Gram Panchayats. This needs to be thoroughly reviewed for improving its effectiveness. Financial hardships and non-availability of technical know-how with gram panchayats should be resolved in an efficient and amicable way.
- vii Gap between the present norms for provision of drinking water for rural and urban areas needs to be reduced by keeping the improved life style in view, the norm of per capita rate of daily water supply should be stepped up.

As high as 75% of the water resources get evaporated in hot season when the mercury touches 45° to 47° C in several parts. No effort be spared to conserve substantial quantity of water underground. Harvest maximum water during monsoon, especially in dry/drought prone areas.

Farmers in the irrigation dam command area be compelled to use canal (surface) water, and in no case should they use ground water. Participatory planning for water resources through active association of farmers.

Successful outcome of restrictions on tubewells etc. water table has risen during the last 5 to 7 years. Concentrated and sustained efforts in this direction would prove effective.

Inter-link of reservoirs is advocated - dry belt from Vadodara to Ankleshwar will benefit if the waters from dams in South Gujarat are drawn to this dry belt and South Gujarat farmers are forced to use well water for irrigation as this region receives adequate and assured rainfall.

Saurashtra scenario is unique in that most of the water from dam reservoirs is used for drinking purpose and cannot be provided for irrigation.

### **Pollution**

Increase in population responsible for increased water pollution, industrialisation another important contributory factor to pollution increase. Prevent water pollution through specific legislative measures and their strict enforcement.

- Need for efficient monitoring of effluents and river water together with adjoining sub-soils.

### **Tribal Areas**

Check dams in tribal areas - most favoured and successfully executed minor irrigation scheme. Recommendation to grant revolving fund of an appropriate amount instead of grant/subsidy.

Entrust work relating to irrigation not to Forest Department Officials but to Irrigation Department officials - Remove hindrances created by Forest Department. Cultivation of specially suitable trees- flood protection measures, enhancing water use efficiency among tribals through special training/ashram shalas/post basic education schools etc.



## Overall Perspective

Exhaustive data base is necessary for a more effective planning exercise. Building up the data base both micro and macro levels - coordinated efforts of engineers, statisticians, economists and computer experts suggested for the purpose.

Micro watershed found non-viable and banks often deny credit for these schemes. Self-help groups for specific works through own labour input, and other mutual cooperation provide effective answer - success stories throw up necessary guidelines.

Creating water resources - management of water resources - present procedures reveal duplication and overlapping of efforts by agencies like NGOs, DRDA and other government agencies GWSSB, Panchayats etc. e.g. digging of a well sanctioned/executed under Jeevandhara, or by Panchayat or the Department of Irrigation. Avoid duplication and enforce better coordination.

Need for a holistic approach rather than a microscopic approach more welcome. Resource maps should be made available through remote sensing space technology. Cover all the 19 districts so that better land planning based on specific information about water logging etc. could be attempted.

Drinking water - problem of salinity - matters of serious concern - concerted efforts at desalinisation essential in several parts of North Gujarat, Saurashtra and Kutch.

Evolve requirement norms with specific categorisation like water needed for bathing, washing clothes/utensils, drinking by human and cattle, cleaning operation etc. Examine details worked out by Physical Research Laboratory (PRL), Ahmedabad.

Self sufficiency approach be adopted. All rainfall water in the village should be conserved (and not allowed to flow outside the village). Explore suitable devices including public awareness - Inclusion of relevant syllabus in school education (say under the subject of Environment).

Enhancement of awareness levels for prevention of waste of water (use of every drop), more efficient operation and maintenance of local water supply schemes like hand pumps etc. can be better achieved through net-working with the school teachers who are still the most locally respected persons. In Sabarkantha district Motibhai Foundation collected rupees one crore by way of donations from within the district and the same amount is being utilised for installing pipe-line in the district. This is worthy of emulation by other districts.

Take maximum advantage of the experts and professional expertise of renowned NGOs like Sadguru (SWDF), Agakhan Foundation, Anarde Foundation, Arch Vahini, Utthan, Disha, Kutch Vikas Trust etc. Convene a conference of the concerned NGOs for chalking out a detailed workable action plan. Most significant is the motivational role of NGOs. Establish a separate cell for NGOs in the state's Rural Development Department - Recommended formation of a unique NGO by retired irrigation engineers - these engineers will prove competent liaisoning officers between government and NGOs.

Devoted workers', like Chunibhai Vaidya's, scheme of underground/hidden check dams be properly studied and suitably multiplied.

## **Sanitation**

Mandatory provision for sanitation drainage pipes - Construction of low cost pits financed/ subsidised by government outside every house in the village. Integrated soak-pits (flexibility in design suggested) along with hand-pumps in every village. Revise UNICEF norms regarding soak-pits to suit local conditions. Common toilets in rural and urban areas, especially slums in large cities. 'Pay and use' toilets to be multiplied by NGOs like Milk/Dairy Foundation, Industrial Houses (RD Foundations), Lions and Rotary Clubs etc. Erect such amenities on state highways at every 10 kms. Clean Ahmedabad Abhiyan of Prarthana Construction - Safai Vidyalaya - Ishwārbhai Patel - Harijan Ashram - Gujarat Vidyapith - Kundan Kalyan Yojana for rag-pickers are some examples which be introduced extensively. Mobile Sanitation Court suggested - Health education for personal hygiene care - Despite separate arrangement for storm water pipeline, drainage water is illegally mixed up with resultant pollution in the river. Sabarmati is thus one of the most polluted rivers - e.g. all 35 culverts ought to be totally dry in the current (summer) season but it is well-known that water is poured into the river even these days (may '97) through all these culverts in the city though it is not monsoon. Administrative failure to fill up all the vacant (sanctioned) posts of Sanitary Inspectors and Malaria staff personnel aggravate the problems of sanitation in all the cities.

## 4. WATER AND SANITATION

B.S. Trapasia\*

### Objectives

To supply adequate water and the provision of minimum required sanitation facilities.

### Problems

- (1) Planning of adequate water supply.
- (2) Locating the proper area or points for getting water.
- (3) Dry wells or inadequate water supply from wells.
- (4) Problem of short supply of water, especially during summer.

### Recommendations

- (1) Planning of water supply should be in line with the growth of cities. Tata Consultancy Organization has prepared a Master plan upto the year 2000.
- (2) Geological study for the location of water supply is absolutely necessary. It should be checked whether the investigation is done properly.
- (3) For no source supply of water, there is no other solution except to bring water through pipeline.
- (4) To cope with short supply of water in the summer, the authority should try to get water from Narmada canal, Panam Dam, and Dev Dam near Ajwa. But Narmada canal is the best source of water in the future.

## SANITATION

### Problems

- (1) Throwing waste by people on road, common plot etc.
- (2) Problem of disposal of waste by the authority and problem of Leachate.
- (3) Slum areas.

### Recommendations

- (1) The corporation should create waste collection centres to keep the city clean. The corporation can provide door to door collection facility for garbage of three different categories i.e. material, liquid and glsss. Paper waste, aluminium, etc., can be recycled, for its proper utilization. The establishment of compost plant can use garbage in a productive manner.

It is required to change the law about sanitation. The Corporation should have powers to charge penalty and to recover the same from those who throw garbage on road.

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\* Executive Engineer, Water Supply Department, Vadodara Municipal Corporation; Visited Japan under Colombo Plan for Solid Waste Management Programme; associated with M.S. University of Baroda, Vadodara as Ph.D. guide in Solid Waste Management.

- (2) The disposal of waste by the authority is a problem. The end of drainage disposal is any river, pond or any open area. The authority should collect the waste from the city and throw the waste in a big pit or open area. It starts decomposing and creates avirobic. (The bacteria developed in absence of air.) This generates leachates and if mixed with underground water spoils the quality of water. To solve this type of problem the authority should lift a leachates in time.

### **Action Plan**

#### **Short Term**

The authority should create waste collection boxes. Door to door waste collection facility should be provided.

#### **Long Term**

The proper planning and disposal of end of drainage and collected waste from the city. Upgradation of slum areas.

**Vinod K. Padaria\***

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\* Word Processing-cum-Technical Assistant, Department of Economics, M.S. University of Baroda, Vadodara.

T.L. Chauhan\*

**Objectives**

To supply adequate water and the provision of minimum required sanitation facilities.

**Problems (Water Supply)**

- (1) Problem of getting potable water in some of the rural areas viz. village of Sankheda taluka.
- (2) Problem of high percentage of fluoride in potable water.
- (3) Problem of hand pumps getting out of order.

**Recommendation**

- (1) So many borewells have been done by rig but unfortunately because of hard rock the borewells have failed and even at the depth of 200 feet or more; potable water is not easily available.
- (2) The Government has also installed so many hand pumps in mofussil areas, but because of maintenance problem these pumps get out of order. Unfortunately local residents do not take care of these pumps and they get out of order frequently. Many times authorities supply parts of pump to these people (villagers) but they do not take proper care and get it repaired in time. Even some technical training is imparted to these people but unfortunately because of carelessness pumps are not properly working. This is the fault of local community. They would go for drinking water to places more than 2 kms. away but a small part of pump will not be replaced. Authority gives a printed postcard in which the number of reasons for pump's not working are given. The villagers have to tick mark the fault and to send the postcard to the authority and the address is also written but the villagers do not follow this some practice.
- (3) The high fluoride contents damage drinking water in mofussil areas. Specially in Sankheda taluka high fluoride is found in potable water. But there is no way out of this. Either the villager has to walk one or 2 kms. for fetching water or they have to utilize high fluoride water for self as well as for their cattles.

Water of Sainadari village contains high fluoride. Generally 1% of fluoride is tenable but more than that is harmful.

Sanitation problems is not so acute like in urban areas. Normally in rural areas people do not use public lavatory.

Vinod K. Padaria\*\*

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\* Additional Collector, Irrigation, Vadodara.

\*\* W.P.cum-Technical Assistant, Department of Economics, M.S. University of Baroda, Vadodara.

### Objectives

1. Widening and Deepening Dams and irrigation sites rather than new construction.
2. Maintenance of irrigation projects.
3. Expansion and maintenance of water pipelines.

### Problems & Recommendations

1. Resources to maintain pipe lines.  
Adequate funding for changing Pipe-lines.
2. Preservation of water catchment area.  
Check dams are only for drinking water. Water use should not be allowed for agriculture and industrial use.
3. New irrigation  
Saurashtra has network of schemes delayed pipe-lines should bring water from South-Gujarat rivers.

### ACTION PLAN

#### (i) Short Term (2-3 years)

Immediate repair of broken pipelines.

#### (ii) Medium Term (5 years)

Widening of existing dams.

#### (iii) Long Term (10 years)

Linking of South-Gujarat rivers with Saurashtra area.

### Resources Needed

Saurashtra's Master Plan was prepared by the state government. Now consultants need to be approached to get financial update.

### Issues

- (1) How do you manage irrigation water for drinking and agricultural purpose ?
- (2) What kind of administrative difficulties are you facing for water management in your jurisdiction?
- (3) What are the alternative ways and means to manage water supply in Gujarat and Saurashtra?
- (4) What are your suggestions about the IXth Five Year Plan ?

### Response

- (1) We have erratic rainfall in Saurashtra — Also there is problem of seasonal fluctuations of water supply in pipelines. People are breaking pipelines when it is passing from a village. Continuous repairing is going on.

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\* Executive Engineer, Irrigation Department, Civil Engineering Degree - special training at Roorkee University for water management.

Lift irrigation diesel engine is helpful for agricultural purposes. Tanks and dam water is also used for agricultural purpose.

- (2) During summer we have complaints about breaking of pipelines by rural people. Vehicles and emergency staff is used for repairing and maintenance of pipelines.
- (3) Geography of Saurashtra explains that most of the area is rocky land which cannot absorb water. Surplus water flows to the ocean. Coastal areas cannot provide fresh water for drinking purpose.

Permanent solution for Saurashtra is Sardar Sarovar Project and in the short-term to bring water of other South-Gujarat rivers. Saurashtra has sufficient network of pipelines. Jamnagar and Surendranagar districts are permanently scarcity affected. The same is the case with North-Gujarat. In Banaskantha and Mehsana districts there is no river with year round availability of water.

**B.M. Jani\***

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\* Reader in Economics, Saurashtra University, Rajkot.

A.D. Gohil.\*

**Objectives**

1. Ground water planning.
2. Water consumption planning: Storage and rechargeable.
3. Utilization limit and legislation.

**Recommendations**

For rational and proper utilization of water resources, water management is necessary. For salinity of water, water treatment plant, and purification plants are necessary at Municipal Water Tank. Water charges should be according to the use e.g. industrial use and for agriculture purpose. Meter system for water consumption and rationing is necessary in urban and metropolitan centres. Recharging of wells is necessary.

For effective water administration, taluka level hydrologist should be appointed. We need more vehicles for Saurashtra region. District level committees should be free of politicians. The district collector should review work progress.

For effective IXth Plan following are suggested

- (1) Narmada Sardar Sarovar project should provide water to Saurashtra covering all districts.
- (2) Research Institutes should help us in analyzing water.
- (3) Higher water charges for industrial use compared to use drinking purposes, particularly in the municipal area units.

**Action Plan****(i) Short Term (2-3 years)**

Recharging of tube wells in dry zones. Accelerate urban investigation speedy.

**(ii) Medium Term (5 years)**

Rain water storage to recharge ground water.

**(iii) Long Term (10 years)**

1. Rain water conservation flowing to rivers.
2. Open land investigation by professionals.

**Resources Needed**

Global resources need to be tapped for long term planning through World Bank and UNDP and ADB.

B.M. Jani\*\*

\* Research Officer, Office of Geo-Hydrology, Ground Water Division-II, Chinoi Bungalow, Rajkot - 360 001.

M.Sc. Geology, 10 years Water Investigation Experience.

\*\* Reader in Economics, Saurashtra University, Rajkot.



Naliniben Gordhandas Mehta.\*

**Objectives**

- (1) To provide drinking and domestic water supply to all the villages, towns and cities during the ninth plan.
- (2) To provide reasonable level of sanitation to entire urban population during the ninth plan.
- (3) To provide for management of urban waste - both solid and liquid and to abolish manual scavenging.

**Background**

Gujarat faces very acute and serious problem of water supply. Problem is chronic. Out of 4.65 crores people 1.75 crores suffer from water scarcity particularly in Saurashtra, Kutch and North Gujarat. Sanitation facilities are absent or near-absent in all villages and many towns, cities etc. This creates health and other problems.

**Problems & Recommendations**

- (1) Inadequacy of water.  
Innovative measures needed. Recharging of wells etc. to be on a large scale
- (2) Narmada Project not being implemented seriously.  
National level efforts of all types needed. It can become life line for India and Gujarat.
- (3) People, government and local institutions are indifferent about the need for sanitation and drainage.  
Peoples' movements can be started, local institutions' resources should be increased. Youth to be activated. Board be made efficient.

**Action Plan****(ii) Short Term (2-3 years)**

Implement recharging on a large scale - provide incentives.

**(ii) Medium Term (5 years)**

Speed up Narmada project and create water supply availability as promised.

**(iii) Long Term (10 years)**

Complete all projects of irrigation-cum-water supply, educate all people for avoiding waste of water.

**Resources Needed**

Charge full or near full cost for water supply, provide for subsidized water only to the poor. Raise local loans at cheap rate of interest. Allocate more funds in state budget.

Sangita Ghanshyambhai Tarpara\*\*

\* Principal of Girls' High School, a social worker, holding responsible position in women's organization.

\*\* Lecturer in economics.

Chandrakant Keshavlal Mehta.\*

**Objectives**

- (1) To assure drinking water to each household in state.
- (2) To arrange for fool-proof implementation of programmes.
- (3) To accord topmost priority to water and sanitation.

**Background**

Serious problem, programmes announced / formulated but implementation unsatisfactory and corruption - ridden, peoples' efforts needed.

**Problems & Recommendations**

1. Thousands of villages suffer problem of water, sanitation.  
Efforts on war footing with peoples' supervision
2. Lakhs of households vulnerable and starved of water.  
Micro planning and monitoring needed, special provision for the poor.
3. Efficiency, honesty implementation of water, sanitation plans.  
Enforce discipline and lacking in the 'accountability'.

**Action Plan****(i) Short Term (2-3 years)**

Release more funds, and implement the schemes, devise system of incentives and disincentives.

**(ii) Medium Term (5 years)**

Highest priority, leakage free spending by involving people.

**(iii) Long Term (10 years)**

Twenty year sanitation vision' needed, Launch 'Clean Gujarat movement' on Surat pattern.

Sangita Ghanshyambhai Tarpara\*\*

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\* Principal of a primary school, trained in ideals and methodology of 'Nai Talim', social worker.

\*\* Lecturer in Economics.

**K.M. Vaidya\***

### **Recommendations**

- Model Family - Model Village.
- Use modern technique for searching water from new wells, tube wells etc.
- Join tube-well with checkdam.
- Stop water reharvest, store and recharge water in ponds
- lakes - kachcha dams, checkdams, etc.
- Prevent soil erosion by plantation (Land Revolution).
- Set up well, ponds — No Boring.
- Use satellite ISRO technique for new water sources.
- Water near every fall area so we can save soil. Build small Nala or checkdam. e.g., in Taiwan - 13 dams are built on one river - not a single drop of water goes to sea or without use. This type of usage may be adopted here.
- Percolation tank, small checkdams, drip or sprinkling irrigation for agriculture.
- Inter-link lavatory and gober gas for getting better use of gober. It saves forests.
- "Kachcha Bandh" built every year costing about Rs.5000/- is good. Rs.4 or 5 lakhs are not essential, small schemes are better to prevent corruption .
- Provide sufficient funds for building "Khet Talavdy" - ponds checkdams etc.
- Give information about government schemes.

**I.K. Patel\*\***

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\* After completing M.B.B.S, Dr. Vaidya worked for poor's health and socio-economic revolution. He is a social worker, prepared watershed project for 30 villages of Vansda taluka.

\*\* Lecturer, Shri Vanraj Arts and Commerce College, Dharampur, Valsad.

R.B. Sheth\*

**Problems**

- Problems of - Salt - Fluoride - Hardness TDS in drinking water (Sea border areas, like, Bilimora, Navsari etc.)
- Water Pollution near industrial area.
- Seasonal scarcity of water in Bulsar.
- Resources problem - Administration and Political obstacles are affecting in big project like Narmada - Madhuban etc.
- Defective pipeline, open nallas, open connections irresponsible staff, chlorination problems in Municipal area.
- Centralization unit for water supply maintenance - recovery etc. - problems.
- Water-borne diseases.

**Recommendations**

- Give drinking water top priority, prevent wastage in irrigation. Recharge wells, it maintains water level.
  - Use drip or sprinkling irrigation methods in agriculture from ponds, nala-bandhs etc.
  - Set up purification plants for sea water. It is better than a expensive big project (e.g. Narmada).
- (2) For hilly areas - dig up ponds, build small checkdams nala-bandhs and stop flowing water, store it and reharvest.
- Use ISRO satellite for locating additional water.
  - Use drip or sprinkling method, but it is useful for some crops only.
  - Percolation tank, small dams for reharvest.
  - Big trees, like Vad (Baniyan) or Pipal are indicators of underground water. Bore or tubewell is not advisable, adopt modified Jaldhara Scheme.
- (3) Chlorination and bleaching of water is most essential after properly checking. Chlorination is needed to prevent growth of harmful bacteria. Some dirty habits of tribals cause deceases.
- (4) People do not pay taxes to municipality.
- Strict administration, separate organization required for water supply.
  - Decentralization of water supply.
  - For one lakh population, one IAS officer should be posted.
  - Metering the water use and charging accordingly.

\* Executive Engineer, P.A. Works Division, Valsad. He has supervised, implemented and suggested hundreds of schemes to government for the benefit villages.

- (5) In industrial areas small industries save expenses by not operating treatment plant.
  - Strict administration is needed - Random checks necessary.
- (6) Maintain Input - Output of water in big projects, use every drop of water.
  - Due to corruption big project are not advisable but big pond is needed for recharging water level.
- (8) Percentage of water usage.
  - 5% for drinking.
  - 20% for industry.
  - 75% for agriculture.

**I.K. Patel\***

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\* Lecturer, Shri Vanraj Arts and Commerce College, Dharampur, District. Valsad.

## Problems

It has been found that the local bodies are unable to bear the financial burden of heavy investment for water supply and sanitation facilities. Inadequate supply of these facilities leads to diseases like cholera, typhoid, malaria, filaria, elephant leg, dengue etc.

The procedure of acquisition of land for Pumping station, distribution network and sewage pumping and disposal network is a lengthy process it takes years prior to its functioning.

Due to increase in population, the capacity of existing water supply and sewers is inadequate to carry the increased waste water flow resulting in overflowing of sewers.

Discharge of industrial waste water, with fluoride, nitrates sulphur etc. is responsible for causing waste hazards.

Private agencies have made a business to pump out ground water and supply it to industries in some of the areas in Gujarat causes decreased ground water levels leading to salinity of ground water rendering unfit for domestic use.

## Suggestions

- Land acquisition procedure should be simplified,
- Local bodies should approach World Bank, HUDCO, and other agencies for financial assistance.
- Improvement and modernization should be carried out in sewer clean water supply lines, and pumping stations.
- For preservation of health and hygiene, stress should be given for construction of low cost latrines in urban, rural and slum areas.
- Local bodies should facilitate effective mechanism for disposal of human waste.
- Local bodies should take strict action against private hospitals which do not follow proper procedure for waste disposed Hospital waste should be destroyed separately.
- Any people who dispose their waste in public should be penalized heavily.
- Hygiene education should be started from pre-primary levels to create awareness for cleanliness.
- Commercial pumping of ground water should be prohibited and every house owner should be pressurized to provide facilities for recharging the rain water.

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\* Dy. Commissioner (H & H) SMC, Surat. highly qualified in public health and Preroutine Medicine.

\*\* Deptt. of Economics, South Gujarat University, Surat.

- Periodic dredging of rivers and canals should be carried out.
- Domestic and industrial water supply should be metered and charged like electricity, so that wastage of water is avoided.
- The State Government should prepare special master plan to meet growing acute drinking water scarcity in rural and urban areas and spend adequate amount on drinking water supply and sanitation.

**K.S. Zankaria\*\***

## 5. AGRICULTURE & ALLIED ACTIVITIES

### (i) EXPERTS

Dr. R J Mody  
Dr. S S Mehta  
Dr. B S Bhatia.

### (ii) RESOURCE PERSONS

Mr. A W P David, ACS (RuralDev.)AC&RDD  
Mr. B K Bhavsar, Dir. of Animal Husbandry  
Mr. A M Vyas, Director of Agriculture  
Mr. B K Odedra, Director of Horticulture  
Mr. V.B. Buch, ACS (ARD)  
Mr. Chaman Kumar, (Secy., Coop.)

### OBJECTIVES:

To increase income and employment in agriculture.

Focus:

1. Increase in productivity of agriculture.
2. Increase in gross-cropped area by multiple cropping.
3. Value addition in agricultural operations.
4. Increase in allied activities like Animal Husbandry, Horticulture, etc.
5. Rate of growth of agriculture should be raised to about 3% during 9th plan.

### BACKGROUND:

Gujarat's performance with respect to production, productivity, incomes and employment in 70s in agriculture and allied sectors was very high, but Gujarat failed to carry on the same trend in '80s and '90s resulting into stagnation in agriculture. However, agriculture is still very crucial for Gujarat economy. Major State income emanates from it, and 60% of population depends on it for their income and employment.

### PROBLEM

1. Stagnation in agriculture with no increase in production, productivity, incomes and employment

### RECOMMENDATIONS

- \* Detailed planning: The agricultural economy of Gujarat consists of various agro-climatic zones. Each zone has specific rainfall conditions, soil conditions, etc. Planning for agriculture in Gujarat should follow agro-climatic and environmental conditions.
- \* Due to limited scope of expansion in cultivable land, the production can be increased by multiple cropping, extension of irrigation during winter and summer seasons, and by adopting new technology.
- \* Increase in productivity can be achieved by the use of modern quality inputs like high yielding variety of seeds, use of fertilizers, plant protection measures, micro and macro irrigation systems, etc.



- \* To increase incomes of farmers, crop pattern should be changed so that high value crops are adopted and horticulture is encouraged.
  - \* Productivity of live-stock and poultry should be increased.
2. Irrigated area in Gujarat is only 25%
- Dry land farming and dry land horticulture techniques have to be encouraged as under:
- (a) Drip Irrigation
  - (b) Farm ponds
  - (c) Water-shed development
  - (d) Well re-charge
  - (e) Mulching to stop evaporation loss.
3. Irrational Pricing/Subsidy
- \* Rational pricing policies with respect to irrigation, fertilisers, etc.
  - \* Rational pricing of canal irrigation waters so as to cover at least running cost.
  - \* Large part of the subsidies to rich farmers may be eliminated so that budget deficit can be reduced.
  - \* Increase incentives to the poor and marginal farmers.
4. Ineffective use of agricultural inputs
- \* Use of high yielding varieties/ hybrid variety seed as well as quality planting material
  - \* Balanced use of fertilizers
  - \* Integrated pest management
  - \* Proper credit delivery system
5. Losses of fruits and vegetable in the glut period
- \* Agro-based Processing Plants
  - \* Training of fruit and vegetable preservation should be imparted to the house-wives in urban as well as rural areas.
  - \* Strengthening of fruit and vegetable marketing societies by providing managerial, transport, cooling and storage assistance.

6. Low live-stock productivity

- \* Proper storage and buffer stock management, storage and export promotion.
- \* providing animal health coverage and reaching 5000 live-stock units per veterinary institution;
- \* intensifying the disease diagnosis, prevention and control measures;
- \* improving indigenous breeds of cattle through providing breeding facilities through artificial insemination using foreign semen technology and through natural breeding.
- \* Train livestock owners in modern practices of animal husbandry and management by organising village level Shibir.
- \* Promote improved varieties of fodder crops and enrichment of straws.
- \* Organise village level campaigns for diagnosis and treatment of reproductive and other diseases by experts.
- \* Promote scientific breeding of cattle and buffaloes by assisting unemployed educated youths in taking up mini-dairies and poultry units.
- \* Take up preservation and improvement of sheep, goat breed Kathiavari horses and Kutchi camels.
- \* Give scientific exposure to department personnel through refresher and modern training.

**ACTION PLAN:**

- (i) **SHORT TERM (2-3 YEARS):** Efficient use of existing irrigation potential.
- (ii) **MEDIUM TERM (5 YEARS):** Complete small and medium irrigation projects.
- (iii) **LONG TERM (10 YEARS):** Complete Sardar Sarovar project.

**Suggestions by Department of Agriculture  
(Government of Gujarat)**

**Scheme**

1. Distribution of Hybrid & HYV Seeds and Fertilizers at subsidised rates to ST farmers in TASP.
2. Distribution of HYV & Hybrid Seeds and Fertilizers at subsidised rates to outside S.T. farmers.
3. Distribution of HYV & Hybrid certified seeds and Fertilizers at subsidised rates to outside S.C. farmers.
4. Financial Assistance to the Tribal Farmers of Tribal Area in production of Certified Seeds.
5. Scheme for promoting use of organic manures urban compost and organic/manures pits in Gujarat AGR 12 Normal
6. Scheme for promoting use of organic manures urban compost and organic manures pits in Gujarat AGR 13 S.C.P.
7. Scheme for promoting use of organic manures, urban compost and organic manures pits in Gujarat AGR 14 Tribal
8. Scheme for support to co-operative society for infrastructure storage distribution of Agricultural inputs in remote taluka.
9. Scheme for subsidy for pesticides/ fungicides/ insecticides/ weedicides and plant appliances to the scheduled caste farmers.
10. Scheme for subsidy for pesticides/ fungicides/ insecticides and plant protection appliances in Tribal Area.
11. Assistance to the farmers adopting integrated pest management component for crop protection.
12. Integrated Cereal Development (ICDP) coarse cereal (75:25) Accelerated Maize Development under Technology Mission on Maize".
13. Integrated Cereal Development (ICDP) Coarse Cereal (95:25) Expect Maize Crop.
14. National Pulses Development Project (NPDP)
15. Oilseed Production Programme (Centrally sponsored scheme) 75% Government of India share 25% Government of Gujarat share.
16. Re-organisation & Broad base Agricultural Extension Phase-III including T.A.S.P.
17. Establishment of farmers agro service centres for normal and TASP.
18. Scheme for subsidised supply of drip, sprinkler and pipeline to normal farmers (AGR.54 & 55) scheduled tribe farmers (AGR.52) and scheduled caste farmers (AGR.53).

## V. AGRICULTURE AND ALLIED ACTIVITIES

Himmat Patel\*

### I. Input use

- (a) Indiscriminate use of fertilizers, insecticides and water has on the one hand increased the cost of production and, on the other hand, adversely affected the yield levels. In the long run it has created all the problems adversely affecting soil fertility. A close and meaningful co-operation between administration, Non Government Organisations and farmers; both individually and in formal/informal groups, can increase awareness among the farmers about the use of agricultural inputs. The farmers have by now come to realise this and the opportunity of taking actions should not be lost. There is a need to make all-round efforts in this direction.
- (b) There is a general complaint about irregular and inadequate supply of inputs like power, seeds, fertilizers, insecticides/pesticides etc. Farmers have also grievances about the type and quality of these inputs supplied by traders. It is believed that co-operative societies are the most effective agency for distribution of inputs. Renewed efforts need to be made to organise the village level co-operatives on sound footing.
- (c) The irrigation administration of the government, left to itself, will never be able to ensure water supply. Water supply can be ensured by assigning top priority in organising water cooperatives. In the case where irrigation availability depends on electricity supply, steps should be taken for its regular supply.
- (d) The irrigation administration is required to create efficient canal net work by proper maintenance of canal including water courses.
- (e) Since well irrigation accounts for 60 per cent the total irrigation in the state, it is necessary to ascertain regular and adequate power supply for its efficient use.
- (f) Restoration of adequate level of ground water by recharging of wells and by renovating village tanks in the long run will reduce the cost of lifting water which in turn will reduce the cost of cultivation.
- (g) Efforts should be made to popularise sprinkler and drop irrigation on war footing. The capital cost of these modern methods is quite high. However, provision of subsidy for these modern technology may turn out to be economically viable proposition in terms of social cost and benefits.
- (h) Soil testing has very important place for maintenance of soil fertility. This has to be supplemented by practicing green manure, use of farm yard manures and other such inputs. Therefore, the soil testing work and land reclamation need to be given the highest priority by the state Agriculture Department.
- (i) Since the time of independence, the administration by and large has not paid due attention to the needs of rural sector in general and agriculture in particular. Therefore, the need is felt for streamlining administration with positive outlook.

\* Report of the District Level Meeting held on 5-4-1997 at S.P. University, Vallabh Vidyanagar.

List of the participants is given in Appendix-I

\*\* S.P. University, Vallabh Vidyanagar.

- (c) B.Ed. and M.Ed. courses have no training for primary education, so primary school teaching is considered inferior.
- (d) Very low salaries
- (e) Very young age of entry (i.e. after 10th standard) as teachers.
- (f) Not much of a scope for professional growth
- (g) Teachers involved in mid-day meals and students spend time in going to nearby areas to get clean water for washing vessels.
- 6. (a) District level teachers know about MLL but municipal and private school teachers are ignorant about it.
- (b) Lack of monitoring of various training programmes
- (c) Non-availability of relevant data on literacy, enrolment and drop out rates at district/ block and panchayati raj levels.
- (d) Poor maintenance and renovation of school buildings.
- (e) Resource centres do not have financial and other autonomy.
- 7(i) a. Co-ed schools at primary level in villages/tribal areas.
- b. Male - teachers
- c. Low - female literacy in rural areas
- d. Household duties and looking after younger brothers/ sisters
- 7(ii)a. Low literacy and lack of awareness of parents.
- b. Extreme poverty leading to child labour
- c. Migration of parents
- d. Unfamiliar language and irrelevant syllabus
- e. Teachers using children for their personal work
- f. Gloomy and not clean schools
- g. Poor motivation of teachers.
- h. Diarchy on account of government administration on one hand and decentralisation of political system on the other. This results into increased interference of elected leaders.

### Recommendations

- 1. a. Relieving teachers from duties other than teaching and examination.
- b. Improved infrastructural facilities to be provided to teachers.
- 2. Provide urinals, toilets etc. in schools. Provide clean environment.
- 3. a. Provide more opportunities for refresher courses
- b. Improve infrastructural facilities.
- c. Special textbooks to be prepared keeping in mind the regional dialects.
- d. Every school must have a library where charts, maps, educational toys and newspapers are available.
- 4. a. Make education more relevant and need-based
- b. Non-uniform syllabi depending on local language and situation.
- c. Improve teaching facilities in schools.
- d. Improve attendance of teachers.
- e. To take the services of retired teachers and unemployed rural youths

## II Increasing Yield Level

Long term declining trend of land productivity (yield per hectare) few individual crops and near stagnation of agricultural productivity in the state are two factors which have disheartening impact on the farmers. There are two principal reasons which are very crucial in this respect. They are:

- (1) The state agriculture is highly prone to the vagaries of nature over which neither government nor farmers have any control. The state government however, can strengthen its machinery in meeting these disasters more effectively. The crop insurance scheme can also help in this direction.
- (2) Farmers' own attitude in the use of agricultural inputs deserve serious attention. The indiscriminate use of inputs, particularly the water, fertilizers and insecticides and pesticides has adversely affected the soil fertility in the long run. Low level managerial capacity on the part of farmer is the main responsible factor in this. There is an urgent need to devise ways and means to educate the farmers about taking timely decision in all the agricultural operations, including the use of agricultural inputs.
- (3) The government has to take effective steps as indicated earlier to maintain soil fertility in the long run so that yield level keep rising in the long run.

## III Price of Agricultural Produce

It has been observed that the prices of agricultural produce (1) have remained unremunerative in terms of cost of cultivation (2) the prices are also unattractive in comparison to returns in non-agricultural businesses and professions (3) they are very low at time of market arrival and there is a wide gap between prices that farmers get and the consumers pay for these products and (4) there are wide fluctuations in these prices over years in the long run.

The unremunerative prices for agricultural produce pinch very much. This has disheartening effect on the morale and enthusiasm of farmers; if viewed in relation to fast rising cost of inputs and stagnant, and many a times, declining yield level. The terms of trade is going against the agricultural sector implying thereby agriculture as a net loser against other sectors.

Following measures, if implemented efficiently and effectively, may improve the situation in the long run.

- (a) Assured support prices of agricultural produces should be reasonably remunerative. They should be announced well in advance so as to allow the farmers to take decisions on the basis of declared support prices.
- (b) Export and import policy of agricultural goods should be flexible enough and timely actions should be taken so as to take care of prices of domestic agricultural produce.
- (c) Adequate and effective network for market yards should be created throughout the rural areas in the state. To balance the equilibrium of demand and supply of agricultural produce, the storage facilities at market yards should be adequately created.
- (d) Farmers should be educated and trained in post-harvest technology; so that even in given market conditions they can obtain higher prices.
- (e) The agricultural co-operatives should be encouraged to take up agricultural processing activities for increasing farmer's bargaining power.
- (f) For reduce market imperfections, effective efficient and integrated net work for market information of agricultural produce should be created.

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#### **IV. Institutional Arrangements:**

- (a) Timely and adequate supply of inputs like fertilizers, pesticides and insecticides, credit and seeds play vital role in farm business and their good quality has to be ensured to the farmers. The experience, during the first two decades immediately after independence, shows the necessity of strong cooperative base for agricultural sector.
- (b) The farmers' bargaining power has considerably weakened in the absence of strong organisation. Existence of strong farmers' union is not only in the interest of farmers and farm sector as a whole but also in the interest of entire economy at large. It is therefore, necessary that farmers should organise themselves and the state government should encourage them to do so.
- (c) Research & Development activities should be encouraged in the agricultural sector on the similar line as it is in case of industries. The cooperative efforts in this area should be encouraged both by the government and by the farmers organisation to undertake Research & Development activities.
- (d) The co-operatives should make efforts to increase and improve the entrepreneurial and managerial ability of the farmers. Organisational arrangements should be made for farmers' education and training.

## 5. AGRICULTURE AND ALLIED ACTIVITIES

K.P. Kikani\*

N.K. Kalyan Sundaram\*\*

### Objectives

Sustainable development in agriculture and allied activities, to provide higher income to farmers.

### Background

It is necessary to improve productivity of agriculture and growth of allied activities by co-ordinated and integrated approach.

### Problems

- 1 Lack of irrigation facilities in North Gujarat, Saurashtra and Kutch.
- 2 Lack of water and soil conservation and management and waste land development.
- 3 Exploitation by private agencies by charging high price for inferior seeds.
- 4 Poor knowledge of technical know-how and inadequate training facilities.
- 5 Reckless use of hazardous pesticides/insecticides and improper use of chemical fertilizers.
- 6 Lack of agro-based industries, poor infrastructure and poor export facilities.
- 7 Lack of financial support to small/Medium farmers
- 8 Excessive use of water in canal command areas.
- 9 Out dated and unscientific cropping pattern
- 10 Lack of monitoring of release of water
- 11 Wide income fluctuation and uncertain income.
- 12 Lack of research stations in arid and semi-arid regions

### Recommendations

- 1 Recharge wells, provide drip irrigation technology, sprinklers and mulchings etc. encourage dry farming.
- 2 Create physical conditions for soil and water conservation
- 3 Conduct adequate training through extension workers, in judicious use of inorganic fertilizers.
- 4 Set up more agro industries and research centres.
- 5 Simplify export procedures, encourage co-operative farming and co-operative banking.

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\*\* College of Agriculture, Gujarat Agriculture University, Anand.



- 6 Develop irrigation & infrastructure and encourage agro-based industries.
- 7 Develop information and awareness programme.
- 8 Strict monitoring of water use imposing heavy penalties on the violators.
- 9 Optimum use of available soil conservation technology like contour bonding etc.
- 10 Private Sector to be encouraged for producing and marketing fertilizers.
- 11 Adequate research in pest resistant, salinity tolerant and drought resistant seeds.
- 12 Minimise the role of middleman.

#### **Action Plan**

##### **(i) Short Term**

Need for integrated research application, education, extension services and development projects. Develop irrigation, water management, produce adequate quantities of seeds and elite planting materials; encourage exports.

##### **(ii) Medium Term**

Develop agro-based industries. Encourage waste land development, soil and water conservation and management.

##### **(iii) Long term**

Reverse migration and provide adequate infrastructure.

**T. Sajikumar\***

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\* Department of Economics M.S.University, Baroda.

**N.K. Kalyana Sundaram\***

### **Objectives**

Sustainable development in agriculture and allied activities, to provide greater income and better living for the farmers.

### **Background**

The critical areas of concern is to improve the productivity of agriculture and growth of allied activities by coordinated and integrated approach.

### **Problems & Recommendations**

- 1 Excess use of water in canal command area resulting in drainage problem and salinity.  
Looking into the soil type. Depending on the cropping pattern and the amount of water to be released.
- 2 Orthodox knowledge of cropping pattern is out-dated and unscientific.  
Develop information and awareness programmes on the cropping pattern to be followed according to soil and agro-climatic conditions.
- 3 Lack of monitoring and regulating agency to release water depending on the cropping pattern.  
Strict monitoring, regulation agency to impose penalty on violating the conditionalities.
- 4 Lack of irrigation facilities in Kutch, North-Gujarat and Saurashtra has led to over exploitation of ground water leading to ingress of sea water.  
Recharging of wells, checkdams, farm ponds will provide water during the critical periods and control the salinity.
- 5 Wide income fluctuation and uncertainty in income in the above regions has led to the exploitation irrigation.  
Encourage dry farming techniques sprinklers, drip systems, hydrants, hand pumps, etc. Encourage mixed farming like animal and poultry breeding by providing facilities and conditions for its growth.
- 6 Lack of research stations in the arid and semi-arid regions of Gujarat.  
Setting up research stations to study in detail to the adverse agro-climatic and soil conditions.
- 7 Lack of soil conservation and waste land development  
Optimum use of available soil conservation technology like contour bounding etc. needs to be implemented through development projects.

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Head Professor, Social Science, Ph.D in Soil Science.

- 8 Lack of awareness of soil testing.  
Generate awareness. Strengthen testing facilities.
- 9 Lack of use of organic fertilizers, and inorganic fertilizer lack of use of micronutrients like Zinc and Sulphur etc. apart from N.P.K.  
Encourage more use of scientifically blended organic and inorganic fertilizers. This will take care of the chemical, biological and physical health of the soil.
- 10 Lack of production of organic fertilizers and heavy transportation cost since greater quantum is required compared to inorganic fertilisers.  
Private sector to be encouraged by providing the technology and subsidies and provide also the cash assistance to farmers for transportation.
- 11 Lack of knowledge on the part of farmers regarding the amount of fertilisers to be administered.  
Integrated nutrient management training for efficient use of fertilisers should be provided to the farmers
- 12 Lack of good quality seeds and bio-pesticides.  
Adequate research in pest resistant, salinity tolerant and drought resistant seeds to be produced and supplied to the farmers in an organized manner.
- 13 Lack of remunerative marketing, processing, and export facilities.  
Minimise the role of middle-men who take away the fruits of farmer's hard work. Encourage more value added agricultural exports by setting up grading facilities, storage and transportation etc.

#### **ACTION PLAN**

##### **(1) Short Term (2-3 years)**

There is a need for integrated research application, education, extension services and development projects.

##### **(2) Medium Term (5 years)**

Initiate waste land development, soil and water conservation and management.

##### **(3) Long Term (10 years)**

Reverse the migration and provide adequate infrastructure.

**T. Sajikumar\***

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\* Teaching Assistant, M.S. University of Baroda.

## Objectives

Sustainable development in agriculture and allied activities to provide greater income and better living for the farmers.

## Background

The critical area of concern is to improve the productivity of agriculture and growth of allied activities by coordinated and integrated approach.

## Problems & Recommendations

- (1) Lack of irrigational facilities in North Gujarat, Saurashtra and Kutch.

Recharging of wells, providing drip irrigation technology, sprinklers, mulchings, etc.

- (2) Lack of water conservation and management soil management and its health care.

Misuse of water in command area, farm ponds check dams, afforestation, create physical conditions for the application of soil conservation technology. Land on river banks, canals surplus land with panchayat, soil organization, idle grazing and forest land to be utilized.

- (3) Lack of planting materials, saplings, grafts, seeds, etc. and exploitation by private seed agencies by charging high price for inferior quality seeds. Need for seeds of vegetables fruits.

Government seed farms be utilized for propagation of elite materials on large scale. Encourage private sector by giving subsidies. Act and direct help in setting orchards and its care for 3-4 years.

- (4) Poor knowledge of technical know-how, inadequate training facility, lack of enthusiasm on the part of farmers.

Conduct adequate training through extension workers. Encourage youngsters to attend camps and workshops ensured adequate returns can motivate a change in orthodox mindset.

- (5) Inadequate understanding in the use of chemical fertilizer and reckless use of hazardous pesticides like DDT, BHC, 2-4-D, etc.

Judicious use of inorganic fertilizer and blend it with organic fertilizers. Use of bio-pesticides be encouraged and strict ban in use of dangerous pesticides be made.

- (6) Lack of agro-based industries, poor infrastructure, and marketing.

Setting more agro industries, cold storage facilities, cool chain from field to airports and ports, providing open space in urban areas to market agri-produce.

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\* Head, Department of Horticulture, Gujarat Agriculture University Campus, Anand 388 110.

- (7) Lack of export facility, advertisement in international market, trade fairs in fruits and vegetables.

Encouraging group of farmers to grow a single type of fruit of a particular variety helps better grading for exports. Simplify export procedures. Popularize the quality of fruits and vegetables in international market.

- (8) Lack of financial support to Small Farmers/Medium Farmers

Co-operative farming will make them access banking finance.

## **ACTION PLAN**

### **(1)Short Term (2-3 years)**

Irrigation, water management adequate supply of seeds and elite planting materials should be ensured. Encourage exports.

### **(2)Medium term (5 years)**

Promote agro-based industries.

### **(3)Long term (10 years)**

Strengthen infrastructure.

**T. Sajikumar \*\***

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**\*\* Dept. of Economics, M.S. University, Baroda.**

H.D. Parmar,

**Objectives**

- (1) Farm Mechanisation of efficient use of irrigation and credit.
- (2) Development of crop finance.
- (3) Development of financing agriculture processing.

**Problems & Recommendations**

1. Direct finance and risk  
Power to Branch Manager in Banking Industry.
2. Loan waivers harmful to the financial system  
Government should stop loan of waiver scheme.
3. Funding to landless labourers  
Risk management education to bankers. Insurance business should help banks.

**ACTION PLAN****(i) Short Term (2-3 years)**

Timely delivery of inputs to farmers. Regular supply of electricity.

**(ii) Medium Term (5 years)**

Captive power station in Gujarat by private sector. Water infrastructure contract should be given to private sector.

**(iii) Long Term (10 years)**

Strong co-operative movement for agriculture sector - extension, education to farmer, ancillary employment in rural Sector.

**Issues**

- (1) As a Lead Bank Officer how do you plan agriculture sector in your credit plan ?
- (2) What are the major roadblocks inhibiting growth of agriculture sector in your area ?
- (3) For funding agriculture and allied activities what principles do you follow ?
- (4) What are your suggestions for the effective IXth Five Year Plan ?

**Response**

- (1) We prepare credit plan with the help of District Credit Consultative Committee and prepare schemes for bankable agriculture and allied activities. We give due weightage to sector flow of credit and space-wise flow - Taluka/Village level flow of credit to fund activities. We have liaison with other departments to identify non-traditional activities for agriculture services like tractor repairing workshops, funding of diesel units for fair distribution. Input distribution agencies are also funded by us.
- (2) Our Rajkot District is agriculturally prosperous compared to any other district in Saurashtra. However, water scarcity is felt. Distribution and marketing activities are

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\* Lead Bank Officer, State Bank of Saurashtra, Kathiawad, Gymkhana Branch, Rajkot-1.

not satisfactory. District Agriculture Officer cannot supervise all these activities. Non-availability of effective Non Government Organisations for agriculture extension education is the main roadblock in Saurashtra. Marginal and small farmers are exploited by big farmer and their lobby.

- (3) Activity-wise flow of finance is encouraged. Farmers are making use of organized banking, however still local money lenders are dominating. We extended credit to the farmers or landless labourers to buy milch cattle, food crops and cash crop, agricultural inputs and implements, agro-based industries like deoiled cake, and tractor financing. We follow economic viability and technical feasibility principles for enhancing credit. Now we evaluate risk, and repaying capacity of borrowings too.
- (4) We have 29 banks engaged in funding agriculture and allied activities. Every credit plan doubled the provision for agricultural sector. Most of the big farmers have benefited by funding from banks. We have non-traditional crops and cereals growth in Saurashtra, Dairying on co-operative base, farming pattern and utilization pattern of land are totally depend upon previous years credit plan.
- (5) Suggestions for IXth Five Year Plan as under :
  - (1) Allocation of fund for drip irrigation facilities.
  - (2) Allocation of fund to NGOs for extension education
  - (3) Well re-charging in Saurashtra for effective water table.
  - (4) Provision of fund for the units employing landless agricultural labourers.
  - (5) To stop farm subsidies in green areas having three crops. Make it available to the farmer having less than 10 acres of land.
  - (6) Development and financing of agro-based industries.
  - (7) Non-formal extension education to the farmers.

**B. M. Jani\*\***

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\*\* Reader in Economics, Saurashtra University, Rajkot.

B.A. Jagani\*

**Objectives**

To increase income, employment and balanced agricultural development of the state.

**Focus**

- (1) To increase both production and productivity of agriculture.
- (2) To increase the gross cropped area by multiple cropping.
- (3) To increase the value added in agricultural operations.
- (4) To increase the production and productivity of activities allied to agriculture like horticulture, Animal Husbandry, Poultry, Fishing etc.
- (5) To raise rate of growth of agriculture by more than 3 per cent during the 9th plan period.

**Background**

The programme of agricultural sector of Gujarat was very significant during the seventies. However, stagnation was experienced during the eighties and mid-nineties. Agriculture is still a very crucial sector of the economy as 60 per cent of 'state's population depends upon agriculture for their livelihood.

**Problems & Recommendations**

Stagnation in agriculture, resulting into stagnation in production, productivity income and employment in primary sector.

- 1 Planning of agriculture be made on the basis of agro-climatic and environmental conditions.
- 2 Increase the cropped area of pulse.
- 3 Encourage the use of bio-fertilizers.
- 4 Encourage farmers to use gypsum in cultivation to reduce salinity ingress.
- 5 Subsidy should be increased for checkdams, percolation wells, tanks and other measures to keep water table high level.
- 6 Implement crop insurance for all crops.
- 7 Decentralization of agro based industries e.g. cotton ginning industries near availability of raw material. Interlink between sugar industry, molasses and spirit production should be established.
- 8 Increase value added production in agro-processing like Dehydration of onions and garlic and canning industry.
- 9 Improve post harvest technology for horticultural crops.
- 10 Increase milk and poultry production. Control over unproductive cows and bulls to increase agricultural production to reduce social problems.

A. D Saramma\*\*

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\* Programme officer in the department of Adult and Continuing Education, Bhavnagar University. Ph.D. in agricultural economics from South Gujarat University. He is also a large farmer.

\*\* Reader, Department of Economics, Bhavnagar University, Bhavnagar 364 002.



Ramanikbhai Shambhubhai Talavia\*

**Objectives**

- (1) To increase production and productivity of all crops specially in agriculturally under-developed districts and talukas.
- (2) To increase level of investment in agriculture, to provide more inputs like irrigation etc.
- (3) To diversify agriculture by speedy development of horticulture, floriculture and also to modernize animal husbandry, expand dairying, accelerate fishery, etc.

**Background**

Gujarat is deficient in food grains production. Land productivity is low in some crops. Percentage of irrigation is less than the national average. Narmada project with great potential for irrigation is getting delayed and obstructed. Salinity ingress is increasing.

**Problems & Recommendations**

- (1) Irrigation facilities inadequate, large drought prone areas.  
Complete all irrigation projects. Expedite Narmada Project. Take up recharging on largest scale etc.
- (2) Deficit in foodgrains production.  
Promote crop pattern in favour of food grains, Rationalize price system.
- (3) Poverty of small, marginal farmers and landless labour.  
Provide agri-inputs at low rates. Expand small and cottage industries etc.

**Action Plan****(i) Short Term (2-3 years)**

Provide more credits for higher investments. Cover all farmers in modern farming practices.

**(ii) Medium Term (5 years)**

Appoint expert commission on water management. Develop new techniques for recharging water.

**(iii) Long Term (10 years)**

Remove all obstacles in developing/realizing total potential for irrigation. Avoid all cost over-runs and time-over runs.

**Resources Needed**

Charge economic rates for irrigation water from large and medium farmers. Similarly, charge economic rates for power supply. There is a need and scope for drastic reduction in subsidies, consider taxing rich farmers.

Ketan Dinkarray Trivedi \*\*

\* Well-known progressive educated farmer, performing modern agricultural experiments and spreading modern farming among farmers of district, organizer and office bearer of co-operatives, propagator of recharging of wells and drip irrigation. (Amreli)

\*\* Journalist

**Laxmanbhai Savalia\***

### **Objectives**

- (1) To assist/encourage small farmers for modern agriculture.
- (2) To speed up implementation of programme.
- (3) To broaden, deepen dams, tanks, rivers, etc. for more water for agriculture.

### **Background**

Gujarat agriculture is developed, diversified. Yet gaps/scopes exist. Forty-five to fifty percent farmers are yet to be covered by modern farming. Floriculture needs promotion. Land consolidation is slow. Saurashtra, Kutch are starved of water.

### **Problems & Recommendations**

- (1) Small/marginal farmers are outside of green revolution.  
Provide information, inputs and incentives. Target to cover all.
- (2) Seventy to ninety per cent of rain water runs away-wasted. Extra water of rivers of proper Gujarat is wasted.  
People's movement plus organized government efforts are needed urgently.
- (3) Dams, tanks, etc. are muddled. This results into less water storage.  
Form specific programme and encourage panchayat bodies.

### **Action Plan**

#### **(i) Short Term (2-3 years)**

Arrange for 'Mobilising information, inputs supply etc.' for poor farmers.

#### **(ii) Medium Term (5 years)**

Plan for using/converting/transforming barren-non-cultivable lands into cultivable land.

#### **(iii) Long Term (10 years)**

Encourage 'TREE FARMING.' Simplify full credit availability. Provide inputs etc. at door step.

### **Resources Needed**

Link savings of farmers with government facilities for them. Charge economic prices to wealthy farmers for irrigation, power etc.

**Subhashchandra Shankarlal Nayee\*\***

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\* A leading and progressive farmer, constructive Sarvodaya worker, Amreli.

\*\* Lecturer in Psychology (Amreli).

## Comments

L. Mansingh, IAS

### Action Plan

#### 1. General

A comprehensive industrial policy for Gujarat entitled "Gujarat 2000 AD and Beyond" was announced in July 1995. The policy, the first of its kind in Gujarat, not only sets down the basic objectives of the policy but also the strategy to achieve these objectives. It is comprehensive enough to cover all aspects having relevance to the overall objective of the Government to further accelerate the already rapid industrial development of the State by making Gujarat the most preferred investment destination not only in the country but also in the region.

The recommendations contained in the report of the group are already covered in the same policy document on which action has already been initiated by Government of Gujarat. The up-date on the specific recommendations are given below:

#### Recommendations

1. Rationalise all departments and procedures, and recast maximum effectiveness.

#### Action Taken & What remains to be done

This recommendation is covered in Para 4.20 of the Industrial Policy under the heading "Simplification of Rules and Procedures". The document states that there is an imperative need for comprehensive review of all the statutes, rules and regulations so that they are brought in tune with the reforms and the requirements of the liberalised era. The action point is that the State Government will set up task forces to undertake such reviews with the specific objective of doing away with redundant and irrelevant restrictions and requirements and to simplify the rules and procedures in the remaining areas to facilitate grant of various clearances in an objective and transparent manner.

Unfortunately, the State Govt. has not taken any action on this specific provision of the Industrial Policy document. In the short term, the task forces covering the major sectors such as labour laws, laws relating to safety in the work place, environmental legislation, land laws and other miscellaneous statutes such as the Essential Commodities Act, Prohibition Act etc. should be set up immediately to review all procedures and to simplify them within the existing statutory framework. In the medium and long terms, the task forces may recommend specific and comprehensive amendments of all these statutes to bring them up-to-date to make them relevant to the changed circumstances. In future, all legislations must carry an automatic sunset clause providing for its ceasing to have any effect by a cut-off date unless specifically reviewed and extended by the legislature prior to that date.

#### Recommendations

2. Computerise all relevant departments and organisations first.

#### Action Taken & What remains to be done

This recommendation is covered in Paras 4.22 and 4.23 of the Industrial Policy document. In pursuance of this decision, the Industrial Extension Bureau (INDEXTb) has already retained Tata Consultancy Services to prepare a Project Report for the setting up of a computerised Industrial Data Bank (IDB). At the same time, District

Industries Centre (DIC) in nine selected Districts in the State are being computerised and networked through the NICNET to the State Head Quarters under a central scheme. The remaining DICs are expected to be covered under the computerisation programme during 1997-98 ensuring the establishment of an effective MIS and two-way data flow. The overall computerisation programme consisting of the setting up of the IDB and the computerisation of all DICs would cover the establishment of a Single Window System to facilitate grant of all approvals at the State level to the industrial units from a single point within a reasonable and specified time span. The programme is being so devised that real time information on Gujarat can be obtained by an interested investor anywhere in the world through the internet.

The short term action plan must include adequate allocation of resources for the completion and the commissioning of the computerisation programme as per schedule. At the same time, all other departments and organisations of the government connected with industrial development and investment promotion must not only be computerised and net-worked with the INDEXTB's Industrial Data Bank but their functioning must also be computerised and brought on par to the level of sophistication and efficiency of the proposed IDB. The medium term and long term action plan would be to extend this facility to all departments and organisations concerned with industrial development and to ensure professionalisation of their operations.

### **Recommendations**

3. Establishment of a Single Window to sort out most (if not all) problems, and within shortest span of time.

### **Action Taken & What remains to be done**

This has been covered in Para 4.21 of the Industrial Policy document which indicates that the State Government intends to introduce Single Window clearance system at the District and State level based on a common application backed by computerised processing and clearance through Committees where all the government departments and agencies are represented. This proposal is under the active consideration of the State Government.

In the short-term, the action plan must ensure the establishment of the Single Window system to cover the minimum number of important state level approvals relevant for setting up an industrial unit in the State. In the medium and long-term, the single window system must cover all approvals required at the State level for the purpose of setting up and running of industrial units in the state.

## VI. INDUSTRIALISATION

**R. J. Mody\*\***

The following suggestions were made to increase the rate of industrial growth in Gujarat.

1. The government should be liberal in granting permission for captive power generation by private industries.
2. The administrative delays in government procedures should be reduced. The administrative action should be timely and administrative officers should be accountable for their decisions. The mind set of the bureaucracy is still influenced the old system of "License permit Raj".
3. All subsidies should be withdrawn and the resources thus saved should be used for infrastructural development.
4. In order to increase NRI investment, lessons should be drawn from the experience of the General Motors. It is argued that promises made by the government were not fulfilled.
5. In the long run octroi should be abolished and be replaced by turnover tax. In the short run as immediate measures octroi should be levied by only four major cities of Gujarat. In all smaller towns octroi should be abolished as there is no justification for it. It only leads to corruption.
6. The decisions and actions of the financial institutions like Gujarat Industrial Investment Corporation and Gujarat State Finance Corporation should be time bound. Delays in granting loans defeat the very purpose of financial assistance and it leads to frustration and disillusionment among industrialists. Newly built access roads to industrial areas should be privatised.
7. There is a need for energy policy in Gujarat.
8. Pollution Control Board should be given more powers and corruption therein should be removed.
9. Instead of pouring financial resources in sick units, if they are economically unviable, they should be allowed to be closed down.

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\* Report of the Meeting held at Federation of Gujarat Industries on 7-6-1997 at Baroda  
List of the participants is given in Appendix-I

\*\* Sardar Patel Institute of Economic & Social Research, Ahmedabad.

## VI. INDUSTRIALISATION

B. M. Jani\*\*

### Objectives

1. Eradication of regional imbalances in industrial growth.
2. Diversification of Industries in Gujarat State.
3. To attract N.R.I. Gujaratis to establish industries in Gujarat.
4. Minimization of industrial pollution.
5. Development of Cottage, rural and agro-based industries for rural employment.
6. To solve the problem of sick industrial units.
7. Privatisation of State level business / industrial enterprises.
8. Growth-led export would be appropriate strategy of industrialization than that of export-led growth.

### Problems

1. Globalisation of industrial development may lead to uneven growth of regions and sub-regions in Gujarat State.
2. There is growing regional disparity in industrial growth between Ahmedabad-Vapi belt and other parts of the state.
3. Infrastructural bottlenecks inhibit industrial growth. Supply of drinking and industrial water, erratic power supply, weak transport and communication system appear to be the main problems. The Development of such facilities can help in diversification of industrial base in the state.
4. Inadequate funding of fixed capital and of working capital by financial institutions may create problems for viability for sustainable growth.
5. "Spread effect" of industrialization in urban and metropolitan centres and "backwash effect" in backward rural areas are largely due to locational choice of industry.
6. Incapability of modern industries to absorb more manpower.
7. Choice of priority for large scale, medium scale, small scale, tiny, cottage, and agro-based industries.

### Recommendations

- 1 Reduction of Regional disparities of industrial growth Saurashtra and North- Gujarat and eastern parts of the state.

### Action Plan

1. More functional industrial estates to be established by Gujarat Industrial Development Corporation

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\* Report of the District Level Meeting held on 5-4-1997 at Rajkot

List of the participants is given in Appendix-I

\*\* Department of Economics, Saurashtra University, RAJKOT.

2. Search of new bankable projects by Private industrial consultancy in neglected areas of the state
3. Special drive for industrial finance by the complex of state sponsored corporation in Gujarat.
4. Special Secretariat for industrial development. Special post of Dy. Secretary planning at Saurashtra & North- Gujarat and eastern belt of Gujarat Region with H.Q. at regional centres.
5. Special drive for entrepreneurship development in both the regions.
6. Identification of new bankable projects by Nigam.
7. Arrangements to be made for dissemination of information to ultimate entrepreneurs.

### **Recommendations**

#### **2 Infrastructure Development**

##### **(A) Water**

##### **Action Plan**

1. Linking of South- Gujarat rivers to Saurashtra, North-Gujarat and Kutch by obtaining funding from global financial agencies.
2. Water conservation, ration for industrial use.
3. Efficient Management of water in catchment area.
4. Permanent water facilities in scarcity affected areas.

##### **Recommendations (B) Power**

1. To bridge the gap in demand & supply of power.

##### **Action Plan**

1. Development of captive power station by private companies.
2. Development of energy through non- conventional way-wind, solar, ocean.
3. Development of lignite- based power stations.

### **Recommendations**

##### **(C) Railway facilities**

1. Linking of Bhavnagar Tarapur Railway B.G.
2. Conversion of Bhavnagar Surendranagar track into B.G.
3. Conversion of Wankaner Navalakhi MG to BG.0
4. Conversion of Rajkot Veraval MG to BG

##### **Action Plan**

1. For this, Regional Railway Corporation like Konkan Railway Company can be developed in Gujarat to fund such projects.
2. Privatisation of Track conversion.
3. Container Depot at Rajkot, Jamnagar, Bhavnagar and Kandla port for export container placement
4. Extension of railways like Howrah, Navjeevan, Satabdi Exp. upto Jamnagar.
5. Super fast railways between Rajkot and Bombay, Rajkot and Delhi via. Ajmer.

## **Recommendations (D) Road Development**

### **Action Plan**

1. To avoid road accident & quick transport Ahmedabad-Jamnagar Road should be made four track road.
2. Express Highway between Ahmedabad-Delhi and Ahmedabad-Bombay.

### **Recommendations**

3. Development and Financing of small, tiny and cottage industries

### **Action Plan**

1. Decentralised planning and agencies engaged in industrial development
2. Diversification of industries by development of new bankable projects by private industrial consultancies and a complex of state corporations in Gujarat, for this development of food industries, electronics, automobiles, refineries, etc is necessary
3. Training of rural manpower to utilise in industrial sector.
4. Master plan for industrial development in Saurashtra, north-Gujarat, and eastern parts of Gujarat can be prepared by banks and a complex of industrial development corporations & private consultancies.
5. Resource-based, agro- based, export-based industrialization in Gujarat

### **Recommendations**

4. Preventing sustainable pollution in industrial sector.

### **Action Plan**

1. Measures to prevent water, air and traffic pollution in Gujarat.
2. Chemical industries should be provided guidelines and pollution treatment plants.
3. To stop industries located near sites of drinking water.
4. Industries Association, Chamber of Commerce and other voluntary organisation should plan to find out ways to stop pollution spreaded by industries in Gujarat, particularly in Ahmedabad, Baroda, Rajkot, Ankleshwar & Vapi industrial estates.
5. At least 10% of total investment in industries should be earmarked for pollution preventing devices.
6. To take, in advance, precautionary measures for possible adverse effects of the new wave of industrialization in Gujarat.

### **Recommendations**

5. Industrial Investment Strategy

### **Action Plan**

1. Changing the order of investment in favour of industrially less developed regions
2. Gujaratis living abroad and in other states should be invited to such areas with fiscal incentives.
3. To attract NRI and Global resources for investment in industrial sector.
4. Providing liberal credit to industrial trading and export activities in the state.
5. Big houses and large private corporate sectors may be encouraged to invest in backward areas of Gujarat by industries department and IndextB in Gujarat.



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## **Recommendations**

### **6. New Entrepreneurship Development**

#### **Action Plan**

1. Engg. colleges, technical institutes and universities should develop entrepreneurship development programme.
2. Effective Monitoring, follow-up and evaluation of programmes by centre for Entrepreneurship Development in Gujarat and by Entrepreneur Development Institute of India.
3. Taping of New Entrepreneur for self-employment.

#### **Resources Needed**

Action plan involves sizable investment in sub-sectors of industry as well as infrastructure development for industrial development in backward areas of Gujarat. Private sector and privatisation in industrial development & infrastructural development is necessary. Resources should be mobilized from Non Resident Indian Deposit, investment and from global level institution like Asian Development Bank, World Bank. Resources can also be mobilized through Bond market, development of capital market for long term investment. It is equally necessary to divert resources for urban development plan as industrialization process encourage urbanization and speedy growth of Metropolitan cities in Gujarat.

## 6. INDUSTRIALISATION

Paresh Raval\*

### Objective

To strengthen the base of large and medium industries in the Gujarat.

### Background

Gujarat's industrialisation process suffers from many infrastructural bottlenecks and resource constraints. Attracting more industrial investment may lead to infrastructure crisis in the state.

### Problems

- [1] There is an increasing power deficit along with shortages of other types of infrastructure in the state. Power tariff policy is faulty as farmer consumers are unduly subsidised at the cost of industrial users.
- [2] Subsidy to industry has problems of timely delivery, complex procedures and wrong accounting.
- [3] Old labour laws are hurdles in the better industrial relations.
- [4] Inspector raj continues and economic reforms have not improved the working of state or reduced the role of government.

### Recommendations

- [1] In short term, permission for power generation in private sector be given. For industrial units, power by diesel sets should be permitted and no taxes to be charged. In the long run, of course, more investment in power sector is needed. For coal supply as an energy input, price equalization formulae as in vogue for oil and gas, should be made applicable to the industrial users. Gas supply to Gujarat industries be given.
- [2] Sales tax tariff has to be revised in order to make more competitive and comparable with the neighbouring states. Form "C" needs to be eliminated and in the case of central sales tax procedures have to be simplified further.
- [3] SSI investment limit has been raised recently. In view of this change, limits of sales tax exemption and excise exemption need to be raised. Reservation list of SSI should also be revised to make SSI sector more competitive. Simplification of tax procedures applicable to SSI is urgently needed.
- [4] Old labour laws should be revised to enhance productivity and efficiency of labour. Outdated labour laws can be eliminated and too much labour protection should be replaced by reasonable protection and incentive to enhance efficiency.
- [5] Regarding pollution, instead of asking units to close down their operation, they should be given time of two to three years to find an alternative or adhere to pollution norms.

T.R. Bishnoi\*\*

\* Secretary, Federation of Gujarat. Industries, Vadodara.  
Dr. Raval holds doctorate in Economics, has spent many years working with industry and industry associations and federation of Gujarat industries.

\*\* Reader in Economics, Dept. of Economics, M.S. University of Baroda.

## Objectives

To strengthen small scale industrialisation in Gujarat.

## Background

Gujarat's industrialisation predominated by small scale chemical units which have big pollution effect. There is a need for promoting pollution free small scale industrialisation throughout Gujarat.

## Problems

- [1] Poor infrastructures in GIDC's industrial estates.
- [2] Information gaps are found relating to product markets, quality norms, latest technology and information technology relevant for small industry in Gujarat.
- [3] Too much protection to small industry leading to poor quality of its products.

## Recommendations

- [1] Improve infrastructure - roads, water supply, power in all GIDC's industrial Estates. Even these can be provided to the users at their cost.
- [2] Future industrial policy of Gujarat should have the followings : [a] No more chemical units in the state and shift all the existing chemical units into chemical zones earmarked. [b] Levy of pollution cess from the polluting units and spending that cess amount on programmes for controlling/minimizing pollution. Pollution cess is preferred to closure option of the polluting units.
- [3] It is necessary to set up IIT or Technology University by the state government where new engineering / technology courses can be introduced, which are not covered by the existing engineering colleges in the state.
- [4] Gujarat government should set up more software centres and technology parks at all big cities of Gujarat; Ahmedabad, Baroda, Surat, Rajkot and Valsad etc. Technology park at Gandhinagar is inconveniently located for the Industrial Users. It is not sufficient for the needs of all the industries in the state. The project cost of multiple software centres/technology parks can even be shared between the state and private sector. Videsh Sanchar Nigam Limited should invest more in Gujarat and create information highways and allow access to these highways on the basis of user's charges.
- [5] Regarding ISI Certification, Patent, Trademarks registration etc. small scale units have many problems. No good patent attorney is available in small cities. There is a high search cost for it. Government can provide help to the industry by creating information base, panel of attorneys and making adequate publicity of these things. Lab-Test facility; for SSI-product should be made at all big industrial towns.
- [6] Protection by way of subsidy, reservation, and priority sector status should be eliminated to promote competition, quality, and innovations. No labor laws for the new units (for the first five years of operation) should be made applicable.

All these suggestions, if implemented, will make a big quantitative and qualitative improvement in industrialisation of Gujarat.

**T.R. Bishnoi\*\***

\* Rajen M. Patwa, Director, Patwa Kinaariwala Electronics Ltd., Ajwa Road, Vadodara., completed his B.E. (Elect.) (Baroda) M.S (U.S.A). He set up his own three small scale industrial units, and won a National Award from the Deptt. of Science and Technology, Government of India for scientific innovations and number of other awards.

\*\* Reader in Economics, Dept. of Economics, M.S. University of Baroda.

## Background

No Change suggested in existing pattern except diversification of industries in Gujarat.

## Problems

1. Lack of water and power for industrial growth.
2. Attracting of entrepreneurs in relatively backward area.
3. Modernization of SSI units to face open market competition.
4. Management of NRI projects.

## Recommendations

1. Infrastructural investment to be made by the Government.
2. Liberal finance be made available for acquiring technical knowledge and market development.
3. Dissemination of information to be expedited.
4. Technical guidance be provided to the NRI investors.

## Action Plan

### [1] Short term (2-3 years)

Licensing of SSI is a must. Speedy delivery of raw material should be arranged.

### [2] Medium Term (5 years)

There is a need for long term finance for modernisation of industry. Superior quality or raw material be made available for manufacturing.

### [3] Long Term (10 Years)

Development of industrial consultancies & Technical Education should be emphasised.

1. Infrastructure Development matching with industrialization.
2. Resource-based industrialization.
3. Co-ordination of industrialization Agencies in Gujarat.

## Resources Needed

Sizeable amount will be required for infrastructure funding of industrialization in Gujarat.

## Issues

- (1) What should be the nature of industrial development in IXth plan for Saurashtra ?
- (2) What are the problems inhibiting industrial growth in the region ?
- (3) What kind of innovative schemes are to be introduced by Gujarat State Finance Corporation to fund medium and small scale units ?
- (4) What actions are taken by GSFC to revive sick/close industrial unit.
- (5) What steps should be taken for diversification of industries and growth of export units ?

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\* Regional Manager, Gujarat State Finance Corporation, Ring Road Rajkot-36001

## Recommendations

- (1) Industrialization process should help to produce capital and consumers goods, quality products for exports. Use of local skilled and unskilled manpower for employment generation should be encouraged. Resource-based and skill-based industrializations be made feasible.
- (2) Infrastructural development, availability of working capital and facility for timely disbursement of loans be made. Pollution problem, and legal problem of industrial trade union are major problems particularly in urban industrial estates. Irregular supply of water and erratic power supply do not allow industry to run for three shifts. For this, industrial development agencies should meet once a month to the associations of industry.
- (3) Project Appraisal division, Gujarat State Finance Corporation, Ahmedabad, makes periodical change in schemes for finance. However, there is a need to introduce a special scheme for industrial safety of workers and people living in the vicinity of industrial estates in Gujarat. Development of market skill and market facility appear to be the prime need for the entrepreneurs.
- (4) For rehabilitation of sick units, Gujarat State Finance Corporation has made auctions of closed units and their merger with healthy units. For this Board of Industrial Finance for Restructuring provided Gujarat State Finance Corporation refinance. However, hardly 5% units have been revived in Gujarat. Even new entrepreneurs are also offered to start closed chemical units and other units.
- (5) Traditional industries cannot be ignored in overall industrial development process. Still, industrial diversification can be made through technically sound and financially viable projects of new industries. For diversification possibilities, computerized data should be made available to entrepreneurs about prevailing market situation. Existing small units can start export goods through market competition. Export-House, export finances, banks, entrepreneurs, and industrial association should plan to get exportable surplus of different goods/commodities.

**B.M. Jani\***

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\* Reader in Economics. Saurashtra University, Rajkot-1

**Objectives**

- 1 Growth-led industrialization
- 2 Export industrialization
- 3 Employment-led industrialization

**Background**

District Industry Centres must be well equipped with technical and non-technical staff through change in management of District Industry Centre.

**Problems**

- [1] Lack of infrastructure development for speedy industrialization.
- [2] Inadequacy of viable technical proposals for industrial finance.
- [3] Higher growth of industry in central and south Gujarat Vis-a-vis Saurashtra, North-Gujarat, and Eastern belt of Gujarat.

**Recommendations**

- [1] Priority be provided for power and water projects.
- [2] Technical consultancy should provide bankable projects.
- [3] Incentives to be given in backward areas for development of entrepreneurship.

**Action Plan****(i) Short Term (2-3 Years)**

Infrastructure development in Backward area should be given priority.

**(ii) Medium Term (5 Years)**

Target oriented industrialiation in Gujarat be planned.

**(iii) Long Term (10 Years)**

Rehabilitation of sick units should be encouraged. Access of information to all potential entrepreneurs be expedited.

**Resources Needed**

State level plan is prepared by Industry Dept.— Fiscal incentive to acquisition and merger of SSI units

**Issues**

- (1) What should be the behaviour of industrialization process in Gujarat and Saurashtra on the basis of your past experience to manage D.I.C. ?
- (2) Do you agree that DIC and Government machinery can not meet requirement of industrialist or entrepreneurs ?
- (3) Is it true that industrial growth rate will surely increase employment opportunities? Why ?
- (4) What major changes are to be introduced by District Industries Centre in the IXth plan to boost industrialization in State like Gujarat? .

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\* Manager Economic Investigation, Dist. Industry Centre, Multistoried Building., Rajkot - 360 001

(5) Your suggestion for speedy industrialization in Saurashtra Region?

**Recommendations**

- (1) District Industries Centre tried to develop resource-based, skilled-based, consumer based industrialization by encouraging young entrepreneurs and liaison with other industrial development agencies as per guidelines of commissioner of industry in Gujarat State. Industrial development encouraged growth of export-led industries, and quality of consumer goods products.
- (2) It is a view of some of the industrialists that Government machineries and offices are not co-operative. We have made enough counseling for industrialization. Agro-based industrialization can be made during the period of IXth five year plan. Now Entrepreneurs are satisfied by technical guidance provided by us.
- (3) No doubt, Small Scale Industry sector can provide more employment and has potential too. But, all industries cannot provide employment on uniform pattern. Perhaps competition and globalisation process will encourage cost-reduction at industry level which might reduce employment upto some extent. However industries and services are showing promise for employment generation.
- (4) Changes are required in District Industries Centre. For technical and marketing guidance, Computer cell needs to be introduced for project preparation. Attitude of District Industry Centre offices towards entrepreneurs needs to be changed.
- (5) Recommendations for speedy industrialization,
  - (a) Industrial information library in District Industry Centre.
  - (b) Computerized data be made available to entrepreneurs.
  - (c) Gujarat Industrial Development Corporation should provide effective infrastructure in industrial estates. Most of the estates lack drainage facilities.
  - (d) Co-operation should be sought of all agencies engaged in industrialization to reduce pollution.
  - (e) Salt-based chemical industries in Saurashtra should be established. Water problem is the main roadblock for this in this region. This should be given prior consideration.
  - (f) Need prevails to identify export-based industries for further growth in IXth plan.

**B.M. Jani\*\***

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\* Reader in Economics, Saurashtra University, Rajkot.

Interview: 6.5

Anilbhai Thakkar<sup>1</sup>  
Manharbhai Patel<sup>2</sup>  
Mahendrabhai Shah<sup>3</sup>  
Nagijibhai Patel<sup>4</sup>  
Hemant C. Trivedi<sup>5</sup>

## Objectives

To build up a strong support base for global investment in industrial sector with the help of administrative support.

## Background

India is viewed as the world's most attractive market. It has got attractive software base. All global companies prefer to invest in India. Gujarat is one of the most preferred State. By proper management, investment in industrial sector can be accelerated.

## Problems

- (1) Lack of coordination between Government and Business community.
- (2) Infrastructural bottlenecks for industrial investment.

## Recommendations

- (1) Administrative support system should be revitalized.
- (2) There should be consistency in sales tax rate. Octroi should be merged with sales tax. Reframe the state excise policy.
- (3) Remove bureaucratic controls.
- (4) Scrap the subsidy system.
- (5) Provide incentives and appreciation of the best quality products.
- (6) Cut down the administrative expenditure.
- (7) Policies of the value added production.
- (8) Provide police security to the diamond cutting belts.
- (9) Labour laws needs to be amended to achieve discipline and efficiency, otherwise industrial activities will be negatively affected. Wages be linked with productivity of workers. Better working and living conditions be provided in ship-breaking units.

## Resources needed

Skilled and trained labourers.

A.D. Saramma\*

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1. President, Chamber of Commerce & Industry, Bhavnagar.
  2. Raja Slat Private Limited, Navabandar Road, Bhavnagar.
  3. President, Small Industries Association, Bhavnagar.
  4. Kirti Diamonds, Ghogha Circle, Bhavnagar.
  5. Reader, Dept. of Business Administration, Bhavnagar University, Bhavnagar.

\* Reader, Department of Economics, Bhavnagar University, Bhavnagar 364 002.



**Objectives**

- (1) To industrialise all 182 Talukas of the state, comprehensively.
- (2) To provide all inputs including land, entrepreneurship training etc.
- (3) To simplify procedures, promote young people liberally, provide prompt centralised clearance.

**Background**

Gujarat state is ranked high in industrialization yet its industrialization is centralized in "Golden corridor" of Vapi to Ahmedabad. Many Districts are less industrially developed several talukas are backward in industries. Gujaratis are enterprising and they are national leaders in some of the industries.

Income and employment generating small scale and cottage industries are not given sufficient priority.

**Problem**

- (1) District-wise unbalanced industrial development is observed.
- (2) Less than needed encouragement is given to small and cottage industry.
- (3) Industrial pollution is increasing. Absence of industrial research, activities and inadequate facility for preparing young people for industrial enterprises exist.

**Recommendations**

Set up special corporation to establish industries in districts and talukas. Expand activities of infrastructural-board.

Frame comprehensive liberal policy for this, assist this sector liberally, set up relevant corporations.

Make anti-pollution laws more powerful. Activate research organisation. Establish permanent district level training institutes for development of young, and new entrepreneurs.

**Action Plan****(i) Short Term (2-3 Years)**

Arrange for single window clearance. Promote district-wise potential studies.

**(ii) Medium Term (5 Years)**

Undertake scientific survey for industrialization of backward districts. Provide marketing arrangement for better marketing of products of cottage industries.

**(iii) Long Term (10 Years)**

Set up permanent commission for pollution free and sustainable industrialization in the state.

**Resources Needed**

Reduce tax-evasion. Cover untaxed and uncovered commodities. Create environment for proper tax compliance. Awake citizens, patriotic spirit.

**Ketan Dinkarry Trivedi\*\***

\* Experienced Gandhian social worker and activist, aged 75. Publishing weekly Amreli Samachar for mass awakening.

\*\* Journalist

### Objectives

- (1) To industrialize all Districts, talukas comprehensively.
- (2) To achieve pollution free balanced industrialization.
- (3) To remove poverty and unemployment by development of small sector.

### Background

Though, Gujarat is industrial state; several gaps exist. Four to six districts and 40-50 talukas are much less industrialized. Small and cottage industry sector's potentiality is untapped. Substantial development of industries and diversification have achieved.

### Problems

- (1) Four to six districts and 40-50 talukas are industrially backward.
- (2) Problem of pollution is increasing.
- (3) Power supply is not sufficient for industry's requirement.
- (4) Lower investment in small-cottage industry has been noted.

### Recommendations

Make special provisions. Set up Boards or corporations. Enforce laws strictly. Plan for power in advance.

More organizational and financial set-ups are needed.

### Action Plan

#### (i) Short Term (2-3 Years)

Training should be provided for development of entrepreneurs on much larger scale.

#### (ii) Medium Term (5 years)

Plan to ease and liberalize procedures, conditions for finance.

#### (iii) Long Term (10 Years)

Create 'Think Tank' Tremendous scope for development of Marine, Food Industries.

### Resources Needed

Compel Banks for more credit, Allow/encourage urban co-operative banks to lend more.

Subhashchandra Shankarlal Nayee\*\*

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\* A social Activist, leading businessman.

\*\* Lecturer in Psychology.

Lalit M. Chinoy\*

**Problems & Recommendations**

- (1) As in large scale industries small - scale industrial units suffer from under utilization of capacity.  
There should be greater co-ordination among the various government agencies. Association should cater the needs of small industries, like finance, raw-materials, technical expertise, marketing export promotion, impart institution and so on.
- (4) There is no price stability in electronics products. The prices of electronics products are decreasing day to day, while it is not so for products of other industries.  
Bring price stability in electronics and control price level.
- (5) There is no provision for controlling pollution in Industries i.e. water pollution - air pollution etc. The industrialists easily side track this provision.  
Put up control on pollution by imposing responsibility on pollution control Board. Make it compulsory to prepare pollution treatment plant in every industrial estate.
- (6) In technical education unit the Gujarat State is well behind. Per capita investment is more but technical knowledge is low.  
Industries should start technical institutes and technical Schools.
- (7) The five year plan is not effective for developing backward area. Industries should not be established in the said area. Problems of electricity, stable market, availability of technical man power are very acute in these areas.  
For starting industrial development in these areas give more compensations in terms of subsidy and tax benefits. Provide cheap and sufficient electricity. Establish Technical Colleges in these areas.
- [2] With respect to industry, at present four years lag operates. Simplify its procedures and regularize its time limit for release of subsidy to industry. Subsidy should not be treated as an income or profit of unit for the income tax purpose and this can be tax-exempt as it is given an incentive.
- (8) Industrial fairs are not held regularly. People do not come to know about new production and technology.  
The industrial Development Corporation should arrange industrial fairs twice a year and arrange demonstration of new technology.
- (9) Now-a-days the handloom business is not run in Gujarat. There is no stable market for hand-loom. Most of the workers remain unemployed.  
Give employment facility to workers. Create market stability by giving protection. Give others benefit like provision of subsidy and tax benefits.
- (10) Feed back of worker, Industrialists, and people.

D.R. Bhandari\*\*

\* Mr. Chinoy graduated with Mathematics and served with Insurance Company in the United States of America. He is a Managing Director of J.B. Bode FibPlast Pvt. Ltd.

\*\* Lecturer, Shri Vanraj Arts & Commerce College, Dharampur.

Dilip Sohoni\*

**Problems & Recommendations:**

- (1) According to the factory act there are 20 workers work in a single industry which is not proper. In my opinion it should be 30 workers.
- (2) There are two days of staggering in a week for power supply. It affects production. Government should start a separate electric power supply station in various industrial areas. Industries work for only one shift instead of three shifts in a day.
- (3) Many industrialists have taken loan and subsidy but some industries have incurred loss.

Government subsidies should be continued only to small scale industries. Give permission to manufacture only one type of product for single industry. So there is no competition.

- (4) The industrialists are interested only in increasing production and not conscious of product.

Type of work and man power per hour should be developed by industrial association.

- (5) Workers are unaware of new technology. They are untrained.

Government should start orientation training centres in school.

- (6) Financial problem for Kutir Chall and small scale industries cannot be compared with big industries. Loan policy facility is not adequate.

The Industries Association should be given a financial funds/loan with subsidy/low interest loan. Make easy and attractive export-import policy.

- (7) The Indian product is not competitive in international market in terms of quality and price.

Prizes should be given for high quality and more export production. Make easy acts for exports.

- (8) Inequality of state & district for developing Industries.

Government should start justified area for each District G.I.D.C. for developing backward area more benefits special project should start.

- (9) The total production has increased but quality of production is not good. Problems of workers welfare, child labour, women labour are rising.

Give attention for productivity. Welfare activities for workers should be increased. Child labour should be removed. Implement strictly women labour act.

- (10) Differential Act for central government and state government. More benefits and easy Act for central government industries.

The same act, benefits, facility should make for central & state government, electricity privatization. Number of factory should control in G.I.D.C. Area.

- (11) Factory inspector should become practical while solving the problems of industrialist. legal steps should not be taken in minor matter.

- (12) There are 600 to 650 companies in industrial area. Out of these only 10 to 15 are limited in industrial estate of Umargam. This is insufficient. This should be more. insufficient. It should be maximum.

D.R. Bhandari\*\*

\* Managing Director, Sohoni Metal Craft Pvt. Ltd., G.I.D.C. Umargam, Dist. Valsad.  
Chemical Engineer, President of Rotary Club.

\*\* Lecturer, Shri. Vanraj Arts & Commerce College, Dharampur.

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**Interview 6.10**

**J.G. Krishna Babu\***

1. Administrative approach is personal - unnecessary system for movement of files.
2. Unnecessary meetings should be avoided. Most of the time we here "Saheb is in the meeting". For expediting the work concepts should be clear. Problem solving approach- solution will be always uni-direction - not multi-direction - creative thinking is required.

**Solution**

- (i) Delegation of power at lower levels, Take step that improves the entire system.
- (ii) Reduce paper work - time saving devices.
- (iii) Follow up system should be very efficient

In the long term, automation is advisable and computerization is welcome.

**B. C. Thaker\*\***

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\* Operational Manager, Hindustan Petroleum Corporation Ltd.

\*\* Sardar Patel Institute of Economic & Social Research, Ahmedabad.

**Interview 6.11**

**Guranathan\***

**Solution**

- (i) Abolish Octroi - free movement of goods reduces the time in transportation and traffic problem is reduced.
- (ii) Ahmedabad Municipal Corporation - success story with respect to- raising resources from outside.
- (iii) Anand Dairy attracts more resources through global investment.
- (iv) Decisions taken by an out going government should be adhered to by the incoming government also. It removes instability generated in the minds of investors and entrepreneurs - global as well as Indian.

In medium term, increase infrastructural facilities, improve existing roads, improve water facility, electricity facility in the remote areas.

In the long run - create new power generation plants, extend railway facilities, communication facilities, Computerization at government level should be efficient and solution of problems should become quicker. Decision making process should become faster.

**B. C. Thaker\*\***

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\* Finance Manager, Hindustan Petroleum Corporation Ltd.

\*\* Sardar Patel Institute of Economic & Social Research, Ahmedabad.

**Objectives**

- To expedite implementation of government's industrial policies.
- To decentralize the power of industrial development authorities and to simplify administrative procedures.
- More liberalization of the banking sector for industrial finance.

**Background**

Several inputs like fuel and chemicals are subject to government control and quota. The industries experience difficulties because these inputs are not available regularly in time.

When government declares some reliefs in the form of tax-relief or subsidies; there is a long time gap between the notification and the implementation of the reliefs. When the relief is implemented the situation is changed.

The District Industrial Centres (DIC) were established for decentralization of government's power. But actually DICs do not have adequate powers and they have to ask for approvals of the higher level authorities. The higher authority has no clear picture about local situation and the decision comes too late to be useful. Therefore, DICs have become an additional link or an obstacle in industrial development.

The branch managers of the nationalised banks do not have discretionary powers of lending; actually they only can calculate the scope of development, the profitability and creditability of an industrial unit.

**Problems & Recommendations**

Government actions are not consistent with the objects of government's industrial policy.

To reduce the duration between the notification and implementation of regulation, and to fix the time period for the same.

To deliver raw materials and fuel as per government's quota regularly.

The small scale industrial units have to suffer due to lengthy procedures and the harassment of bureaucracy.

DICs should have more power

The procedures of dealings with government's offices should be made simple.

The meaning of the term 'liberalisation' is subject to review; the powers of bureaucracy should be limited.

The local branches of the nationalised banks do not give adequate credit to the industrial units.

More discretionary powers should be given to the branch-managers of the nationalised banks.

Most of the industrial units do not maintain the quality of product.

To give incentives to the quality maintaining units in the form of subsidy, relief in taxation etc.

The manufacturers of poor quality product spoil India's reputation in the export market.

**Ghanshyam Upadhyay\*\***

\* M.Sc. (Microbiology), Industrialist and former President of Saurashtra Chamber of Commerce, Bhavnagar.

\*\* Bhavnagar.

## Interview 6.13

Nitin Kankiya\*

**Objectives**

To develop infrastructure especially in Saurashtra region by which the process of industrialisation can be speeded up.

To develop healthy competition for the benefit of the consumers as well as the domestic industries.

**Background**

Saurashtra is an important region with various activities like ship breaking, steel rerolling, diamond industry, plastic industry, cement industry, fishery, engineering, pottery etc. Saurashtra grows onion, mango, groundnut and cotton. There are so many places of tourist attraction and pilgrimage But the infrastructure of this region is very poor. There is only one broad gauge railway line upto Jamnagar and only one national highway upto Kandala. Telephone, electricity, water etc. facilities are also not sufficient for fast industrialisation.

The foreign industrial units come to India with higher technology, huge capital and better management. In India interest rate is higher than international rate of interest. In these circumstances domestic industries cannot compete with foreign industries.

Most of the public sector units incur losses and financial scams are very common.

There is no relationship between education and industrial needs. The graduates of universities are not competent to work in industries.

**Problems & Recommendations**

In Saurashtra region the process of industrialisation is very slow.

To convert the meter gauge railway line into broad gauge line.

To construct a bridge over the Gulf of Khambhat and join Bhavnagar and Bharuch by direct road, gas pipe-line of Ankaleshwar and water pipeline of Narmada.

To convert the coastal state highway in to a national highway in Saurashtra.

Private sector should be permitted to generate extra electricity.

To provide more facilities of telephones and water.

There is no healthy competition between foreign and domestic industries.

The domestic industries should be protected by various government policies like export subsidies, import, taxes and industrial taxation etc. and Foreign units should be restricted with above steps.

Most of the public sector's units incur losses, give inferior quality products & services and work with inefficiency.

The public sector should withdraw gradually from the production sector and private sector should be encouraged with incentives.

Committees should be formed time to time to review all the government expenditure.

No relation between education and industries.

To give practical knowledge to the students of universities in various industries; especially students of Commerce, Engineering, Management, Economics, Physics, Chemistry etc. Co-ordination between Universities and industries is necessary.

Ghanshyam Upadhyay\*\*

\* An Industrialist. Honorary Secretary, Steel Rerolling Mills' Association, Bhavnagar.

\*\* Bhavnagar.



Ranjan Munshi\*

**A Creation of a Special Zone in the Gulf of Cambay**

We suggest to the Government of Gujarat to create a Special Zone in and around of Gulf of Cambay for:

- i) Exploration of oil and gas fields in Bombay high sea, Hazira, Bhandut, Aliabet, Piram Island, Malpur, Cambay, Matar, Siswa, Dholka, Bakrol, Wavel, Modhera, Mehsana, Asjol and others.

These potential oil and natural gas fields should be fully surveyed and assessed. After the assessment, a concrete proposal should be prepared to estimate the results of oil and natural gas within these regions.

- ii) We strongly suggest the Government of Gujarat to approach the World Bank and other Consortium of banks and foreign companies for accelerating the exploration of these various fields at the earliest.

**Infrastructural development to sustain the development of Special Zone**

If this Special Zone is marked for the rapid economic development of Gujarat through pursuing the policy of privatisation, joint venture and collaboration, the future of Gujarat has tremendous potentials as far as the investment and the employment variables are concerned in this Special Zone.

Natural resources made available to Gujarat in this region; the development of ports at Pipavav, Bhavnagar, Dahej and Hazira will add the enormous potentiality for the development of export-import, business, for the development of ship breaking and ship building which would enable to change the face of Gujarat globally and nationally within 10 years time.

To sum up, it is clearly indicated that there are enormous hidden potentialities in the Special Zone mentioned above, in the Gulf of Cambay and Arabian Sea covering the coast of Saurashtra and in ports like Bhavnagar, Pipavav (including ship breaking yard at Alang) and ports like Dahej and Hazira.

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\* Secretary General, Federation of Gujarat Industries, Baroda

Note: The conclusions are based on the studies of Federation

## GROUP 7: CHILD HEALTH & NUTRITION

### (i) EXPERTS

Dr. Pravin Visaria

Mr. Tomoo Hozumi

Dr. S.S. Mehta

Dr. Vikas Satwalekar

### (ii) RESOURCE PERSONS

Mr. P Basu, ACS Panchayat&amp;Rural Hsg

Mr. G C Shah, Housing Commissioner

Dr. N.D. Dhasura

Shri R.M. Patel

### OBJECTIVES:

- (a) To bring down infant mortality rate below 40 per 1000 live births by 2002.
- (b) To decrease malnutrition prevalent in young children from existing 50% to 25% by 2002.

### STATUS:

66% of infant deaths occur during first month.

Malnutrition increases sharply after 6 months.

40% of deaths in first 5 years occur due to diarrhoea and pneumonia

### **PROBLEM**

Malnutrition  
Ineffective neo-natal care

Need to reach the Unreached

Death due to pneumonia

Malnutrition in 0-2 age grp.

### **RECOMMENDATIONS**

Reduce it by revamping current ICDS  
Equip health centers to attend to neo-nates;  
retrain all front-line workers including *dais*,  
effective communication to mothers.

Focus on semi-urban & urban slums, tribal  
populations. Achieve near-universal  
immunisation through oral rehydration therapy,  
other locally accepted methods and ducation.

Appropriate training for correct case  
management of pneumonia for front-line  
workers. Adequate supplies.

Revamp ICDS implementation & focus on 0-2  
years age group.

### ACTION PLAN:

Evolve a state nutrition policy with effective mechanisms to implement it. Integrate ICDS and MCH through joint trainings and supervision at the field implementation. Community involvement would be enhanced through participatory, bottom-up planning.

## 7-B: REPRODUCTIVE HEALTH

### **OBJECTIVES:**

Reduction of maternal mortality to 2 per 1000 live births and promotion of reproductive health.

### **BACKGROUND:**

All maternal deaths occur following a complication. Common complications that account for 75% obstetric deaths are: anemia, sepsis, haemorrhage, eclampsia and obstructed labour. Anemia and sepsis can be prevented by ANC and trained attendance at delivery, most complications need treatment at First-level Referral Units (FRUs).

### **PROBLEM**

66% of 88 FRUs are non-functional

Women's health is a neglected area

40% women don't get essential obstetric care

Inefficient logistics

Sanitary Conditions in rural labour

### **RECOMMENDATIONS**

Attend to deficiency in skilled manpower. Make FRUs operational by short term skill based training of in-service doctors to perform emergency obstetric care.

Urgent action to focus on women's health, so as to also meet population goals.

Early registration of all pregnancy, 3 checkups, anemic control, TT immunisation, iron supplemental, trained attendance at delivery. Strengthening services for women's health through training, IEC and monitoring.

Improve management and logistics through decentralisation as well as appropriate training.

One room in every village with all sanitary conditions where all labour can take place.

### **ACTION PLAN:**

- |                                    |                                                                                                                     |
|------------------------------------|---------------------------------------------------------------------------------------------------------------------|
| (i) <b>SHORT TERM</b> (2-3 YEARS): | Reduce incidence of the main killer complications                                                                   |
| (ii) <b>MEDIUM TERM</b> (5 YEARS): | Improve the availability of maternal care in remote rural areas including better patient mobility (at short notice) |
| (iii) <b>LONG TERM</b> (10 YEARS): | Overall social consciousness about maternal health.                                                                 |

## VII. CHILD HEALTH AND NUTRITION

**H. H. CHANDARANA\*\***

- \* Problem covers the children in age group of 0 - 6 years in Gujarat. They constitute approx. 60-65 lakhs. Vulnerable children belonging to poor, illiterate families are approx. 30-35 lakhs.
- \* Health and Nutrition are important; they are interdependent aspects - The problem has backward and forward linkages-family welfare programme are only half successful - poor immunization of pregnant women - 30% deliveries by untrained personnel - Inadequate care of newborn and infants - Reproductive morbidity - unmet family planning needs - Anaemia etc. - are backward linkages to this problem.
- \* Forward linkages are
  - (a) 15-20 lakhs children above five are not enrolled in schools
  - (b) Large number of child labourers
  - (c) school dropouts,
  - (d) juvenile delinquents and children in difficult circumstances
  - (e) 5-6 lakh street children.
- \* Components of the problem
  - (a) High rates of infant and child mortality leading to decline in child survival
  - (b) High rate of maternal death
  - (c) Ineffective neonatal care
  - (d) malnutrition and under nutrition of 50% children
  - (e) Incorrect management of child diseases of pneumonia and diarrhoea
  - (f) Serious malnutrition in 0-2 age group.
- \* Other major component of problem - Reproductive health problem of pregnant delivering and would be mothers - Elements of component are:
  - (a) Nonregistration of large number of pregnancies
  - (b) 30% deliveries are done by untrained personnel
  - (c) Women's health is largely neglected area
  - (d) 40% women don't get essential obstetric care
  - (e) Locations (Logistic) are inefficient
  - (f) complications are unattended
  - (g) High rate of illiteracy among women and mothers is observed
  - (h) Resultant lack of health and nutrition information - cum - education of children

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\* Report of the District Level Meeting held on 9-4-1997 at Amreli  
List of the participants is given in Appendix-I

\*\* Economics Department, Arts & Science College, Amreli

- (i) Ignorant, unconscious humanhood and motherhood intensify serious problem of child health and nutrition
- (j) children are neglected substantially
- \* These problems are realised by many organizations, institutions but co-ordination, co-operation, mutual support among them is lacking. This leads to inefficient, inadequate, faltering, and uncertain performance.
- \* There are inadequacies in programmes and non-availabilities of medicine. There is non-committal attitude and approach of the majority of health and Intensive Child Development Scheme (ICDS) personnel.

### Recommendations

- \* ICDS are designed properly - but they are performing poorly. The coverage of children is inadequate - Total coverage should be carried out. Anganwadis are the centres of services yet they are ill-equipped in terms of personnel, supplies etc. There is a need to motivate all personnel to work sensitively, devotedly, efficiently with missionary spirit - Workers' remunerations should immediately be raised and qualifications, skills, competence should be upgraded.
- \* There is a need to allocate financial and all other resources on war footing to all ICDS blocks in time and with adequate amount - Priority should be real and visible. Achieve targets fully.
- \* Entire health infrastructure needs to be made functionally effective - Infrastructure is wide and comprehensive - There is an immediate need for strengthening the same. Fill all vacancies, arrange provide training for all. Equipments need, vehicles needs and several other physical facilities should be made available.
- \* Arrange to provide comprehensive 'HEALTH CARD' incorporating immunization, ante-natal care, Iron, Folic Acid, vitamin A, Birth Weight, High-risk condition in mothers etc.
- \* Plan and implement integrated communication approach. The strategy of umbrella concept should include protection of infants from five common diseases by immunization, protection against other diseases, death and disability.
- \* Functions and services of ICDS usually get low priority by Health Department in terms of allocation of financial, manpower and various other resources. There is a need to reverse this serious ground reality. Many problems of maternal and child mortality have roots in the social, cultural and physical environment of a community - Community environment needs immediate improvements - CSSM programme needs co-ordination and linkages among various sectors:- water and sanitation, Rural Development, Women, child and social welfare; Youth and education related activities; local bodies including panchayats and municipalities; professional bodies like Indian Medical Association (IMA) and Trained Nurses Association of India. All services related to CSSM should be integrated in the community - All health and ICDS personnel should be compelled to stay at headquarters so that mothers, children and general public get life saving services.
- \* Maternal malnutrition leading to low birth weight causes neonatal mortality - To rectify this, improve coverage of pregnant and lactating mothers under ICDS with appropriate health education - plan for improving ante-natal care and identification of high risk infants and provide for referral service. - To reduce maternal mortality rate plan and implement efficiently essential obstetric services at village level - First level referral units should effectively deal with or treat obstetric emergencies.

- \* Educate women to avoid or remove self-effacing behavior while availing health services. Urban health services need to be reintegrated and organized for child health and nutrition - All functionaries of various schemes such as ICDS, UCD, USB, UBSP should be mobilized to facilitate implementation of programmes.
- \* Package of Services designed for child : (I) Immunization, (II) Control of diarrhoeal diseases, (III) ARI : Pneumonia therapy, (IV) Vitamin A prophylaxis for children below 3 years of age, (V) Newborn care at home level - Designed for mothers : (Pregnant women) (I) Immunization, (II) Control of Anaemia during pregnancy, (III) Ante-natal care, (IV) Screening and referral of high risk cases, (V) Care of problems: sepsis, toxemia, bleeding, obstruction, (VI) Spacing and timing of births - Arrange to implement these faithfully and vigorously.
- \* Devise and implement state level comprehensive Nutrition Policy with contentful real programmes - District to be made operational unit.
- \* A national campaign for all-round cleanliness and sanitation needs to be initiated and the spreaded throughout the country - citizens to be awakened - "SURAT PATTERN" to be emulated in Gujarat.
- \* Arrange to provide safe, potable, pure water supply to all towns - villages for enhancing general health status.
- \* Arrange to register all births and deaths fully.
- \* UIP and UIP plus need to be made fully effective and result-oriented.
- \* Girl-children are most neglected by all including parents. Establish institutes / organizations / corporations and/or frame schemes for comprehensive cares of girl-children - Girls belonging to 13-18 years age group should be covered under these schemes.
- \* Provide for facilities for regular counseling, check-ups, follow-ups and monitoring of health, nutrition, education of Girl-children specially belonging to 30% - 40% families living below the poverty line and just little above poverty line.
- \* Arrange to obtain area specific infant mortality rate - know causes for high rate and devise measures - prepare and distribute booklets in simple language on personal-household hygiene, sanitation and use of safe water, pure air, foods etc.
- \* Establish citizens health counseling committees in all villages-towns etc. Enlist co-operation of enlightened citizens - request local Non Government Organisations or dedicated individuals to co-operate with Anganwadi workers.
- \* Arrange for health and nutrition of children belonging to slum-dwellers. They are the most neglected children and victims of malnutrition. superstitions about food, care of diseases etc. be removed by appropriate mass-education.
- \* Organize state level campaign for "DIETARY REVOLUTION" explaining benefits of balanced diet.
- \* Implement effectively scheme of solving child labour problem - Make a scheme for enrollment, retention and achievement of children who are yet not enrolled-Devise measures for solving school dropout problem - Educational impact on health, nutrition is real. There are other benefits of education which can be derived.
- \* Devise separate schemes for balanced diet for infants [1] (0-12 months and [2] growth and development monitoring of children (0-6 years).
- \* The main problem is lack of implementation of schemes. It is necessary to seriously-attempt to rectify this.
- \* Vision beyond health and nutrition-Need for initiation of children's socialization, culturalization, humanization and spiritualization to realize their full potential.

## 7. CHILD HEALTH AND NUTRITION

A.R. Shah\*

### Comments on the programmes

#### 1. Mid-day Meal Programme

There is improper implementation

Should be continued more intensively, with more resources and proper implementation.

#### 2. Expansion of Anganwadis in rural and backward areas with supplementary nutrition, health checkup etc.

The workers are not sincere.

Anganwadi workers should get better emoluments.

They should get better training

#### 3. Health, nutrition education, pre-schooling education, vaccination etc., at Kindergarten.

The vaccination programmes are going-on, well-known and are good.

Education at pre-school should not be implemented.

#### 4. More child care centres for looking after children of working women.

There are very few of these centres

More day-care centres should be provided by the government.

#### 5. Primary health care centres to be equipped for preventing food contamination, adulteration.

Not under purview of PHCs to take care of such problems.

Number of Sanitary inspectors should be increased.

#### 6. Training for women health and child care.

Very essential between age of 12-14. The level of such services and training is presently inadequate

NGOs should be given responsibility for such training.

#### 7. Family welfare programme for over-all vaccination to children.

There are not enough funds

More funds should be allotted for this purpose.

### Action Plan

1. The field of child health and nutrition should get more provision for medicines.
2. The entry of multi-nationals in this field should be prevented. It will have an adverse effect on the services of this sector.
3. Health sector should not be privatised.
4. More discipline should be introduced in government health centres.
5. NGO's should be encouraged. They have a positive role to play.
6. An independent commission should be appointed to look into the affairs of this sector at the earliest.

Umesh Naik\*\*

\* Department of Pediatrics, Medical College, M.S. University of Baroda.

\*\* Lecturer, Department of Economics, M.S. University, Baroda.

### Comments on the programmes

#### 1. Mid-day Meal Programme

- a] There is loss of study time of students & teachers

An independent evaluation commission should be set up to monitor the programme

- b] It is suitable for the nutritional requirements of children.

The commission should not be an expensive proposition.

- c] There is improper implementation, and leakages of resources.

#### 2. Expansion of Anganwadis in rural and backward areas with supplementary nutrition, health checkup etc.

- a] It is a substitute for the nutritional requirements of children.

- a] NGO's have the confidence of people, attract them and encourage them

- b] The workers are not dedicated and are not properly oriented.

NGO's also have better utilisation of funds. They should be encouraged.

- c] They do not have clarity of perception or motivation.

The Anganwadi programme should be implemented under the supervision of NGO's if fund is made available to them.

#### 3. Health, nutrition education, preschooling education, vaccination etc., at Kindergarten.

- a] Not productive at pre-school (Kindergarten) level

Should be implemented at school level.

Innovative methods should be used to impart health education.

#### 4. More child care centres for looking after children of working women.

- a] There are un-trained attendants, resulting in under-care.

Not worth it.

- b] There is problem of space, resulting in cross-infection.

Joint family system is a better alternative.

- c] Due to cultural differences, dietary habits are affected adversely.

#### 5. Primary health care centres to be equipped for preventing food contamination, adulteration.

- a] Not the purpose of PHC's to take care of such problems. Already are over burdened with other duties.

There should be surprise checks.

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\* Department of Pediatrics, Medical College, M.S. University, Areas of interest : Child Health, Neonatology.



6. Training for women for health and child care.

a] No problems

School teachers may be paid extra to impart such training.

A certificate course be introduced for girls not going to school in age group 14-18, and stipend be paid as incentive.

7. Family welfare programme for over-all vaccination to children.

a] Low level of literacy is a problem

Works reasonably well.

**Action Plan**

The present focus of child health education, care and nutrition is oriented towards diagnosis and treatment of diseases. In the long-run, all necessary steps should be taken to re-orient this field towards stressing the component of health. That is, more and more emphasis should be given to making people aware of the positive concept and idea of health, how to recognise its various traits, and how to cultivate and maintain them.

**Umesh Naik\***

**Interview : 7.3**

**P.J. Baxi\***

**Objectives**

- 1] Child health care
- 2] Industrial health for workers
- 3] Prevention of Chronic diseases

**Problems & Recommendations**

- 1] Management of child health with meagre resources  
Education for mothers
- 2] Lack of Hospital facilities and Primary Health Centres.  
More funds for maintenance of hospitals.
- 3] Funding to the poor for health care  
Health insurance facility for the poor.

**Action Plan**

**(i) Short Term (2-3 Years)**

Updating primary Health Centres' Mobile Hospitals.

**(ii) Medium Term (5 years)**

Thelassaemia Hospitals- Leprosy Hospitals funding for better instruments.

**(iii) Long Term (10 Years)**

- (1) The Medical Colleges to increase number of Doctors
- (2) Price Control on Medicines.

**Resources Needed**

Plan can be prepared with NGOs at village level, Taluka level, District level and State level to mobilise resources. Pension fund need to be used for Health care and long term investment.

**Recommendations**

- [1] At each level, we need :
  - [a] Leprosy Hospital
  - [b] Thelassaemia Hospital
  - [c] Children Care Centre
  - [d] More medical colleges
- [2] Government hospitals cannot reach at all levels, NGOs (like Lions Club) should help for occupational health.

- [3] Looking to the rising number of patients of chronic and contagious diseases, NGOs should be encouraged to open hospitals in rural areas. Fiscal incentives should be provided by the Govt. to do so. More mobile vans for Blood bank are necessary.
- [4] For child health care, mother must be taught importance of nutrition food and education facilities need to be extended. High school and college level blood group test and maintaining a card should be encouraged. Blood donation should be encouraged. Surprise checks on medical stores and prevailing malpractices should be stopped. Clean water and food need to be provided to maintain child health care.
- [5] The following actions are required :
  - [a] Instead of medical allowance to employees, 100% expenses should be given only at the time of serious sickness and hospitalisation.
  - [b] Dedicated workers with voluntary organisations engaged in public health.
  - [c] Adequate instruments in medical colleges and in Government hospitals.
  - [d] Free medical aid to all with no discrimination.
  - [e] Better hospital management of all Govt. and private hospitals with adequate resources and equipments.

**B.M. Jani\***

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\* Reader in Economics, Saurashtra University, Rajkot-5

### Objectives

- 1] Effective Health Programme for Children, young students.
- 2] Hygienic facilities for poor people.
- 3] Efficient Hospital Management.

### Background

Effective Delivery system for Health and Medical Care in society.

### Suggestions

- 1] Child health education
- 2] Insurance reform
- 3] Old age people hostel and health care.

### Action Plan

#### [i] Short Term (2-3 Years)

- a) Providing nutritious food and milk to pre-school children
- b) Periodical check up of school going children
- c) Education about hygiene and sanitation.

#### [ii] Medium Term (5 Years)

- a. Clean drinking water
- b. Preventive measures against diseases
- c. Funding for updating hospital facilities.

### Issues

- [1] What is the nature of disease in pre-school children, school going children and working class?
- [2] What is the duty of schools and parents to prevent diseases?
- [3] Suggestions for the plan formulations

### Recommendations

- [1] Contagious diseases are more in pre-school children. Proper child care is necessary to prevent diseases. For school going children, we have deficiency of hygienic food. Most of the diseases spread through water and food. Care is not taken by parents and teachers.

For working class, we need sufficient calorie intake to prevent diseases. According to the age and nature of work food intake should be taken.

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\* Medical Officer, Saurashtra University, Rajkot.

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- [2] Cultivating good habits about cleanliness and sanitation by schools and parents. Courses at primary level must include these topics - publicity through posters and wall papers and different media.
- Health check-up is periodically necessary in school, colleges, and work place of working class.
  - Traffic sense in children to prevent accidents.
  - Cost of health negligence should be taught to the children.
- [3] Suggestions for the child health-care
- [a] Free medical check-up periodically i.e. twice a year by education institutions for children right from K.G. to the college level.
  - [b] Sex education and cleanliness to prevent from abnormal diseases.
  - [c] Special health care and hostels for physically handicapped children.
  - [d] Education about blood and eye donation.
  - [e] Clean drinking water in schools and at workplace.
  - [f] Prevent child exploitation at work.
  - [g] Teaching of symptoms of new diseases in children and preventive action.
  - [h] Distribution of milk powder and biscuits packets to the children of families living below poverty line.
  - [i] Cultivating good hobbies, development of games and exercise for the children.
  - [j] Special programme is necessary for occupational health and safety coming up from industrial pollution.

**B.M. Jani\*\***

## Interview : 7.5

Jasubahen B. Gathani\*

**Objectives**

- [1] To reduce infant mortality rate
- [2] To decrease malnutrition prevalent in young children from existing 50% to 25% by 2002.
- [3] Reduction of maternal mortality to 2 per 1000 live births and promotion of reproductive health.

**Background**

Sixty six percent of infant deaths occur in the first month, malnutrition increases sharply after 6 months, 40% of deaths in first five year occur due to diarrhoea & pneumonia. Most maternal deaths occur following complication, five complications account for 75% obstetric deaths. Child and woman's health and nutrition are neglected area. Lakhs of children don't get health facility.

**Problems**

1. Vulnerable children of 0-6 age group belonging to poor, illiterate families approx. 30-35 lakhs. Don't get health facility.
2. High rate of IMR and high rate of maternal mortality
3. Health infrastructure inadequate and inefficient, "food and nutrition security" not available to crores of children in India and lakhs of children in Gujarat.

**Recommendation**

1. Devise special and adequate health infrastructure
2. Improve and strengthen P.H.C.S., sub-PHCs etc. and I.C.D.S., M.CH. programme.
3. Effective implementation of comprehensive Mid-day-meal scheme covering all children.

**Action Plan**

Evolve a state nutrition policy with effective mechanism to implement it. Integrate ICDS and MCH through joint trainings and supervision at the field implementation, community involvement would be enhanced through participatory bottom up planning.

**Resources Needed****(i) Infrastructure**

- 1) Equipment, labour rooms in existing sub-centres and improved RCH facilities of PHC and FRUS
- 2) Transport and mobility
- 3) Training and Reorientation

**(ii) Funds**

<u>Purpose</u>	<u>Amount</u>	<u>Sources</u>
Nutrition	325 crores	9th Plan
Reproductive and child health (RCH)	56 crores	9th Plan and international funding.

Sangita Ghansambhai Tarpara\*\*

\* Social Worker, experienced Government Officer, working in I.C.D.S., doing much for upliftment of need.

\*\* Lecturer in Economics

**Interview: 7.6**

**Bhanuben Navalkant Joshi\***

**Objectives**

- (1) To reduce IMR drastically
- (2) To reduce maternal mortality rate
- (3) To provide balanced nutrition to all children in need.

**Background**

IMR is high, maternal mortality rate high, child morbidity high, children - specially girl-children neglected usually, education not available to 15 lakh children, programmes marginal.

**Problems**

1. High IMR, morbidity high, maternal mortality high.
2. Uneducated mothers/parents neglecting children - girls.
3. Poverty great obstacle

**Recommendations**

1. Activate health infrastructure, expand it.
2. Female literacy be made upto 90-95%
3. Speed up assuredly poverty removal programmes.

**Action Plan**

**(1) Short Term (2-3 years)**

Revamp, improve, modernise ICDS, MCH, DWACRA, others

**(ii) Medium Term (5 years)**

Provide, release resources, cover left out street children, child labour, children of moving population.

**(iii) Long Term (10 years)**

Comprehensive children policy, special Government Department needed, encourage NGOs in big way.

**Sangita Ghanshyambhai Tarpara\*\***

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\* Retired High School Teacher & Social Worker

\*\* Lecturer in Economics, Amreli.

## Interview : 7.7

G. Mishra\*

We find certain problems and loopholes in the various schemes for child health and nutrition of the Government. As a result, in working we have not yet achieved desired or pre-determined objectives of child health and nutrition programmes. Therefore certain schemes seem to be having only a political purpose.

**(A) Problems**

- (1) From the child health and nutrition point of view, the Mid-Day Meal scheme is a good scheme and it must be continued, but the problem is that the food which is provided to children under this scheme. It is not of good quality. That is what we call normal food is not being served. This scheme serves the purpose to attract the children for primary education but has failed to improve child's health.
- (2) To run the scheme very efficiently, the physical facilities are not provided sufficiently by the Government. For instance many primary schools do not have a separate room to keep the food materials and to cook the food.
- (3) People working in this scheme do not get good salary or remuneration as compared to salary of the people who are working in other occupations. Moreover cooking staff is not taken on permanent basis. As a result they do not like to work very sincerely and enthusiastically.
- (4) Primary health centres do not have enough medical staff, frequent health check up of children is not possible. Although is quite necessary.
- (5) Vaccination or immunization programme does not cover all the children who are born at home i.e. children who are not born in hospitals.

**Remedies or Solutions**

- (1) So far as Mid-day Meal Programme is concerned, it is a good one, essential and must be continued both in rural and urban areas. That is this programme should cover only those children of the families whose income is very low or are really poor. This is because of the fact that children of well to do families generally do not like to eat the food or meal provided under the programme. Hence there would be no waste of food materials.
- (2) The Programme must provide good quality of food or normal food which contains nutritive elements like proteins, vitamins, calorie etc. If the Government really wants to improve child health, the Government should pay more attention on qualitative aspect of meal rather than purchasing food materials like wheat, rice etc. at very low price in large quantity.
- (3) Enough physical facilities like a separate premises be provided for keeping or storing food materials and cooking the food.

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\* Additional DHO, Valsad, District Panchayat, Valsad. Dr. G. Mishra at present is working as ADHO (Additional District Health Officer) in District Panchayat, Valsad. She has been serving as Medical Officer for 26 years in Gujarat. Her basic educational qualification is MBBS, DPH obtained from Calcutta University. She is very interested in classical music and classical dance.



- (4) In order to carry out regular health check up programme at each primary school and Anganwadis, the Government should create a Special Cell in each Taluka. This cell must be equipped by providing a separate medical officer, vehicles and other medical staff.
- (5) People who are engaged in the process of cooking the food should be given good salary or wages and they should be employed on permanent base. So that they can work sincerely and enthusiastically.
- (6) Adulteration can be prevented by PHC by empowering them and for prevention of food contamination, PHC can be equipped and strengthened by IEC (Information, Education and Communication) staff to educate the people.
- (7) Vaccination or immunization should be made compulsory for all children.

#### **Action Plan**

In order to implement all these suggestions, a long-term planning is needed. A short term planning will be of no use. It would be a waste of resources and time.

**I.S Desai\***

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\* *Lecturer in Economics, Shah N.H. Commerce College, Valsad*

## Interview : 7.8

Persy B. Kharas\*

- (1) So far as Mid-day Meal Programme or Scheme is concerned the Scheme itself is very good but its implementation is very faulty or defective. Right type of food (nutritive) is not given to children under the Scheme. Moreover, excessive malpractices are going on with regards to food materials like wheat, rice and oil and other materials used for cooking the food, Government provides such food materials which have low nutritive value. This is against child health improvement programme.
  - (2) Still, there are many children in rural and urban areas not covered completely under the immunization. In rural areas, even today, 70 to 80% children are born at home whereas in urban areas, 80% children are born in hospitals. Therefore, the children who are born in urban areas, are getting advantage of immunization.
- Overall or on an average, only 30 to 40% of the total children born, are getting the advantage or covered under the immunization programme.

**Suggestions**

- (1) If the Government really wants to improve child health through the Mid-day Meal Scheme, the only maximum quantity should not be the criteria but sufficient quantity with good quality should be the criteria. It means the food which is being given to children studying at primary school both in rural and urban areas, must be of good quality or having standard nutritive components. To maintain good quality of the food materials like wheat, rice oil etc. there must be frequent and surprise checking of the food prepared and supplied to the children. This can be done in two ways.
  - (a) This work can be entrusted to the Medical Officer of the District Panchayat or Medical Officer of Collector Office with additional honorarium.
  - (b) This work can be handed over to non-government i.e. private medical practitioners or NGOs, like Rotary, Lion and Medical Association of the General Practitioners.
- (2) There should be a surprise checking of the Mid-day Meal Scheme in order to avoid malpractices going on in the Scheme not by Government employees but by NGO as well as dedicated persons who are willing to do so voluntarily.
- (3) The child health check up programme must be introduced on compulsory basis in all primary schools, irrespective of whether the Schools are run by the Govt. Municipality or private management. It can be done with the help of local medical association without incurring too much financial burden on the government.
- (4) The teachers and principals of primary schools and workers of all Anganwadis engaged directly or indirectly in Midday Meal Scheme must undergo training in order to have primary or working knowledge about child health and nutrition. This training can be imparted with the help of private medical practitioners, sociologist, psychologist, and experts in nutrition.
- (5) Immunization or vaccination should be made compulsory in each primary school both in rural and urban areas. So that no child is left without immunization and children born by home delivery can also get advantage of it. This will help in reducing infant mortality rate particularly in rural areas.

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\* M.D. D.G.O. FICA (USA), Kharas Hospital and Maternity Home, Luhar Tekra, Valsad.  
Dr. Persy B. Kharas is a well known Gynecologist, Obstetrician and Laparoscopist.

- (6) More and more child care centres should be established for looking after the children of working woman.
- (7) Primary health centres can be equipped so as to prevent food contamination and adulteration by employing a food inspector as well as doctors from NGO.

### **Action Plan**

The above stated remedies or suggestions can not be implemented and fulfilled the desired objectives through the short-run and medium term planning. It requires a long-term planning and "a strong but honest will" on the part of the Government.

### **Resources Needed**

The Government should increase its budget allocation. If the Government wishes to see that "No child should Go to Bed Without food", the financial resources should be channalised into right areas where they are absolutely and urgently required or necessary financial resources can be raised by cutting down unnecessary expenditure of the Government servants, ministers as well as other politicians. Hence, there would not be a necessity of imposing more taxes on the people.

**I.S. Desai\***

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\* M.A. M.Phil, Lecturer in Economics, Shah N.H. Commerce College, Valsad

### Recommendations

- 1 Quality of health and nutrition depend on the education of women living in Rural and Semi-urban areas. It is necessary to impart education regarding health-care and child nutrition from the primary level.
- 2 Plan spending has not reached the needy people living in rural areas. The planning approach has a bias towards urban class. In order to reach the rural areas it is necessary to give rural dimension by encouraging the rural leadership.
- 3 The diseases in rural areas are mainly because of the lack of health awareness, lack of nutrition and blind-faith. The spread of diseases is also due to infection and lack of sanitary facilities.
- 4 Mortality rate is high among the children in 0-2 age group. This is because the mother is not aware of providing nutritious food as the child grows. In many cases, due to high prices of baby-food products and high prices of medicines, they cannot afford to provide their children the nutritious food as well as required medicines and tonics. Hence, it is suggested that the mothers be educated to bring up the child by giving solid food and other vitamins. This kind of awareness can be generated through the health centres and doctors living in the rural areas.

During the pregnancy period, women start worrying about the possible sex of the child. This anxiety not only affects her health but also affects her mental framework. As a result, she becomes a victim of depression and other diseases. This can be overcome if she is given a support from her family and medical treatment at an appropriate time. She also needs a great psychological support which should be provided from her family members.

Paramedical personnel in a village may be educated with further training to treat such pregnant women. It is noted that neither the rural women visit any doctor during pregnancy days in a nearby town nor doctor visits these women in rural areas. Hence, it is suggested to train para-medical person and in complicated cases the women should be advised to consult the proper medical personnel. It is also suggested to hold medical camps in rural areas to provide gynecological help to the needy women.

- 5 In order to improve health of children and women both non-government and government organizations are active. However, they seem to be working independent of each other. There is a need that both these organizations should work in co-ordination so that the coverage is enhanced and efforts are not duplicated.
- 6 Sanitary conditions are very bad in rural areas. This is primarily because of lack of awareness regarding sanitary use and sanitary facilities. Hence it is suggested that the education regarding sanitary care should be given by either N.G.Os or health centres.

Alka Dave\*\*

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\* B.K. School of Business Management, Ahmedabad.

\*\* Sardar Patel Institute of Economic and Social Research, Ahmedabad.

**Interview 7.10**

**Rupande Shah\***

- 1 In slums and in lower middle class communities, it has been observed that the malnutrition rate is much higher than 50%, the rate according to our survey and findings could be around 70%.
- 2 Neo-natal care through social work agencies working in the health field, family welfare centres, corporation's different schemes etc. should be made more effective.
- 3 There is need to reach to the unreached because of the increase in population , and also expanding slums.
- 4 The literate as well as illiterate women are not at all aware about their physical body - do not see the importance of taking care of the health and body. In some cases, economic problems, pressure of work, home, social customs etc. are responsible, but by and large we should educate women to see themselves how important it is to take care of their health !
- 5 There are no facilities whatsoever like toilet, enough water etc. in rural areas and also in urban slums, The surroundings are unclean. Drainage system is not at all proper - definitely this all leads to unhygienic atmosphere which are the causes of health problems/hazards.

**Recommendations**

- 1 Pregnant and lactating women should be registered and checked every month by Government health Centres and other non-government organizations (N.G.O).
- 2 Vaccination course should be completed at a proper time.
- 3 Drainage system should be improved in rural areas.
- 4 At the primary level the children should be taught about cleanliness, safe drinking water and sanitation and good food habits.

**Rekha Kotak\*\***

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\* Akhand Jyot Foundation.

\*\* Sardar Patel Institute of Economic and Social Research, Ahmedabad.

**Interview 7.11**

**Pallavi Patel\***

**Problems**

- 1 Malnutrition in 0-2 age group
- 2 Death due to pneumonia
- 3 Need to reach the unreached
- 4 Malnutrition approximately 50% and ineffective neo-natal care.
- 5 60% of 88 FRUs are non-functional.
- 6 Women's health is a neglected area
- 7 Many women don't get essential obstetric care
- 8 Inefficient logistics
- 9 Sanitary condition in rural areas are bad.

**Recommendations**

- 1 ICDS programme should be implemented effectively. Supervision and training component should be strong.
- 2 In rural/village level - special training programme to Aanganwadi Worker, Health Worker..for early detection of pneumonia. At later stage, referral training programme should be organised.
- 3
  - i. In tribal areas - awareness programmes for beneficiaries should be organised.
  - ii. Resources should be provided to small N.G.Os.
  - iii. Women motivation should be initiated at a decentralized level.
- 4 Training and education programme should be provided to mother and 'Dayand' (mid-wife) and to remove the wrong beliefs about foods during pregnancy and after delivery.
- 5 Special HRD programme should be organised to the staff of primary health centre. Adequate staff should be provided at Primary Health Centre.
- 6 For sound health of women, their empowerment or involvement should be initiated at political, social, economic and policy level and finally at community level.
- 7
  - a. Linkage and communication should be developed among PHC (Primary Health Centre) and Dayan. Training should be provided to Dayand (mid-wife) as 80% people depend on them.
  - b. Road facilities should be developed at every small village to reach the PHC facilities.
- 8
  - a. Assigned functions to supervisor and Anganwadi Workers should be revised in such a way that they have to minimise lengthy and complicated records/ registers.
  - b. HRD (Human Resource Development) programme should be organised to ICDS workers to minimise their demoralised attitudes.
- 9
  - a. To provide resources at Gram Panchayat level for maintaining good sanitary conditions.
  - b. Family environment should be improved regarding the use of sanitary facilities.
  - c. Proper education and awareness should be provided about personal hygiene.
  - d. Education should be provided in the schools about personal hygiene.

**Swati S. Dave\*\***  
**R.R. Bhatnagar\*\***

\* Chetana, Ahmedabad

\*\* Sardar Patel Institute of Economic & Social Research, Ahmedabad.

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**Interview 7.12**

**P. Dayal\***

**Recommendations**

1. To eliminate poverty - self-employment scheme should be launched e.g. Charkha.
2. To involve the public in programmes of government/voluntary agencies personal contact and applying motivation techniques would be useful.
3. Mothers should be encouraged to feed the child. Mother should be given nutritive diet. If the mother is well fed the child would not suffer from malnutrition.
4. Encourage Homeopathic treatment, traditional herbs. Such herbs should be planted in nearby areas. Parents should be educated in 'preventive medicine.'
5. Community education programme for the male and female and eradication of gender bias.
6. Women should be educated about their own health.

**Swati Dave \*\***  
**R.R. Bhatnagar\*\***

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\* *Rtd. Professor, Gujarat Vidyapeeth.*

\*\* *Sardar Patel Institute of Economic & Social Research*

## GROUP 8: INFRASTRUCTURE

### (i) EXPERTS

Mrs. Anna Malhotra  
Mr. Manubhai Shah  
Mr. Jagdish Piparia  
Mr. N Vittal

### (ii) RESOURCE PERSONS

Mr. LNS Mukundan  
Mr. H P Jamdar  
Mr. A D Desai  
Mr. Swaminathan  
Mr. R K Tripathy  
Mr K. Kailasnathan  
Mr P K Mishra

### **OBJECTIVES:**

Identify and remove/enable removal of bottlenecks in the Development of Gujarat as India's leading Industrial state, focusing on:

- (A) Computerisation and Networking
- (B) Roads
- (C) Ports
- (D) Power

### 8-A: COMPUTERS AND NETWORKING

#### **OBJECTIVES:**

Computerise all functions of Government in 5 years by networking all offices. All data will be entered onto a computer on-line, and information will be used for timely decision making. The system will enable modernisation of procedures since computer networks enable centralisation with decentralisation. It will also enable transparency - of information, updated rules, status of jobs, output. Public transactions through EDI should also be enabled.

#### **PROBLEM**

Computers as show pieces

Archaic procedures

Haphazard IT investment  
Gujarati is the medium  
of Govt. documentation,  
whereas English is the language  
of computers

NIC not effective  
as nodal agency

Training - junior level

#### **RECOMMENDATIONS**

Blueprint for Government computerisation  
and networking.

Redesign of procedures according to what is  
enabled by the networked computer e.g.  
computers permit decentralisation with  
centralisation; an office across cities is as  
well connected as across the corridor.

Standards to be evolved by Govt.  
Vernacular software

Refocus NIC as per blueprint, or bring  
in a pvt system integrator

In-house trainers



Training - senior level

Use mouse (keyboard rarely used)  
Focus not on data entry, but executive level  
usage of computers (Decision Support  
Systems).

**ACTION PLAN:**

**(i) SHORT TERM (2-3 YEARS):**

Networking within all Govt. departments that currently have computers. Start with Gandhinagar, and 5 major cities. Commence redesign of processes since computers permit decentralisation with centralisation. Train officers in Decision Support Systems.

Identify one lead user department, which will spearhead the experiment. Also identify either (i) cross-functional team from NIC or (ii) a private system integrator, for designing and delivering the system. This LAN can be then expanded vertically through the Department, and emulated in other departments. These departments can then be networked together by LAN bridges to create a Wide Area Network (across cities in the same department or across the complex in some other departments).

**(ii) MEDIUM TERM (5 YEARS):**

Networking in all district Govt. offices

**(iii) LONG TERM (10 YEARS):**

Redesign organisations/departments/processes.

## 8-B: ROADS

### **OBJECTIVES:**

Ensure roads are not the infrastructure bottleneck in the development of Gujarat which is a globally preferred investment destination.

### **BACKGROUND:**

There is Rs. 1.21 lac crores of investments in Gujarat in the pipeline. More is likely to come since India is a preferred investment destination with Gujarat topping the list of industrialised states. Combined with aggressive port development (implying transit import/export traffic), the road infrastructure will immediately need to be upgraded so that it doesn't become a bottleneck. This requires adequate funding and speedy implementation.

### **PROBLEM      RECOMMENDATIONS**

Inadequate traffic handling capacity	Time bound upgradation of road network. Widening and strengthening of arterial roads. Construction/ replacement of bridges. Harness private sector for new construction programs. Prepare inter-modal transportation master plan, constructing missing links and bypasses to important towns.
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Inadequate funds	<ol style="list-style-type: none"> <li>1. Substantial increase in budgetary allocation for Road sector.</li> <li>2. Borrowings from World Bank / ADB for specific projects.</li> <li>3. Participation of beneficiaries like large industrial houses, ports, etc.</li> <li>4. BOT projects wherever feasible.</li> </ol>
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No serious private sector participation	Incentives to private sector in the form of BOT policy backed by appropriate support to make the project viable e.g. free land, equity/ debt participation, relief in royalties, etc.
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Inadequate maintenance and high lifecycle costs	<ol style="list-style-type: none"> <li>1. Ensure allocation of maintenance funds based on norms prescribed by the Transport Development Council (Govt. of India) These funds should be sufficient to ensure a resurfacing cycle of 5-6 years.</li> <li>2. Devise reliable maintenance mechanism. Constantly upgrade technology to reduce the total transportation costs and to reduce overall life cycle costs.</li> </ol>
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## **Action Plan**

### **(i) Short Term (2-3 years)**

1. Stepping up of budget allocations and optimum utilisation of the same.
2. Getting the proposed World Bank aided Gujarat State Highways project started on field which would result in upgradation of around 800 km. of arterial State Highways.
3. Execution of Ahmedabad-Mehsana and Vadodara-Halol Projects.
4. Involving beneficiary industries on a large scale so as to step up expenditure on road projects.

### **(ii) Medium Term (5 years)**

1. Make efforts for taking up more externally aided projects on arterial routes so that a major portion of traffic plying on the roads in the state is serviced well
2. Establishing a dedicated road fund
3. Taking up more four laning projects on BOT basis.

### **(iii) Long Term (10 years)**

1. Taking up expressway projects criss-crossing the state.

## **Resource Needed**

1. Well trained cell to deal with externally aided and privatisation projects.
2. Financial inputs

## 8-C: PORTS

### **OBJECTIVES:**

Build Gujarat as the Port State for India in 5 years.

Favourable factors: Gujarat has a long coastline, strategic location between two gulfs, is the closest coastal state for North India, and is gearing up to be the globally preferred investment destination.

Target: Increase handling of cargo from 17 MT today to 100 MT by 2000 A.D. by developing 5 direct berthing ports (3 in joint sector and 2 in Private Sector).

### **PROBLEM**

Infrastructure backup not in place  
Co-ordinated effort needed

Shortage of Government Funds

### **RECOMMENDATIONS**

Prepare inter-modal transport network including railways and roads.  
Prepare 10 year Master Plan for Port Development

BOT terms should be attractive enough for private investment and should include freedom of pricing of services and various tariffs.

### **ACTION PLAN:**

1. Finalise BOT policy.
2. Complete techno-economic feasibility study for above 5 ports.
3. Undertake detailed techno-economic feasibility for 5 Ro-Ro terminals (traffic study for coastal shipping has been completed).
4. Finalise funding and technical assistance with International and Multilateral funding agencies.
5. Organise financial resources for three other ports (already finalised for two ports).

## 8-D: POWER

### OBJECTIVES:

Ensure Power is not the infrastructure bottleneck in the development of Gujarat as the globally preferred investment destination.

### BACKGROUND:

Installed Capacity	Being Implemented	Bidding Total Stage	State Objective (by 2002 AD)
6,538 MW	3,645 MW	3,600 MW	13,783 MW
15,000 MW			

### **PROBLEM**

Delay in decision making

Difficulty in getting fuel

Unfair competition between public/private sectors :

T&D losses not quantifiable

### **RECOMMENDATIONS**

Evolve clear policy for PPA/FSA/IA need is to standardise the procedure for inviting competitive biddings from private sector so as to avoid the delays. Further, we will have to develop indigenous expertise for evaluation of competitive bids so as to cut short the time taken for evaluation of such bids.

Evolve clear policy for PPA/FSA/IA Develop lignite fuel resources through GMDC/GPCL; Explore and develop oil and gas fields through GSPCL; State should actively press for National Fuel Policy to prevent cross transfer of fuel.

Also we will have to plan for sourcing fuel from other countries on a long term basis. This fuel could be Naphtha, Coal, LNG, etc.

Rationalise Electricity Duty, Duty Structure, Sales Tax incentive. Level playing field

Metering of power sector

### ACTION PLAN:

#### **(i) SHORT TERM (2-3 YEARS):**

1. Expedite possibilities of large and small land based short gestation projects.
2. Pursue O&M activities through a least cost option for all ageing power plant with Dhuvaran/Ukai/Utran.
3. Review modernisation of all power plants.

4. Improve (Plant Load Factor) PLF on time bound programme from 65% to 75% @ 5% per year
5. Improve methodology for measuring Transmission and Distribution losses.
6. Every consumer to be metered and accounted. No hidden subsidy to be given. ALI subsidy by Govt. to be transparent and visible.
7. Set up Independent Tariff Regulatory Commission.
8. Make energy audit mandatory and support energy efficiency through incentives.
9. Discourage Power guzzling industries which have no downstream benefit and employment benefit.
10. Encourage Captive Power Plant with level playing between IPP/GEB. Rationalise Electricity Duty, Duty Structure, Sales Tax incentive to ensure level playing field.
11. State should actively press for National Fuel Policy to prevent cross transfer of fuel.
12. Encourage non-conventional energy sources like Wind Power, Tidal Power, Urban Waste, Bio-generator and Solar Energy Power Plant.
13. Corporatise different activities of GEB to the extent possible and also operationalise them along with 'profit centre' approach.
14. Progressively privatise distribution

**(ii) MEDIUM TERM ( next 5 YEARS)**

Develop aggressively lignite fuel resources through GMDC/GPCL even for low calorific fuel;

Explore and develop oil and gas fields through GSPCL;

Develop captive mines in other states for pit based power projects.

Develop Mega Power projects based on imported fuel in the state.

Develop Landing facilities for imported fuel such as LNG, coal, etc.

**(iii) LONG TERM (next 10 YEARS):**

Large investment in T&D, leading to modernisation - bring down real T&D losses to 12.5%.

Complete Narmada Canal in Mehsana/Banaskantha quickly to save energy.

## 8-E: Communication

### 1. Objective

Velocity of business is vital for success in global trade. Gujarat must have the state of the art telecom facilities to maximise its industrial/economic development.

### 2. Background

Telecom has become vital for industrial success especially after liberalisation of the economy. Information technology (Computers & Communications) is a vital resources. It can be used to improve productivity in the entire spectrum of manufacturing and services

### 3. Action Agenda

- (i) Develop a computer literate generation of students by providing computers in all schools/colleges. Funds of the MP's local area development scheme (MPLAD scheme) can be used for this purpose.
- (ii) Place VSAT's in all taluka towns and link the whole state to provide for
  - (a) Long distance learning infrastructure
  - (b) Employment generation by bibliographic data-base business, transmission etc.
- (iii) Make a rule that all items liable for the sales tax must be barcode. This will bring I.T. in the entire trade and industry of Gujarat.
- (iv) The GEB itself can (like Powergrid Corporation) think of entering the telecom area using its powerline network.

### (v) Velocity of business

For making Gujarat based industries globally competitive we need the state of art communication network. The National Telecom Policy which provides for a pluralistic approach to telecom must be fully exploited so that every industry in Gujarat has access to EDI (Electronics Data Interchange) internet and other such telecom facilities.

### (vi) Networking along railway track

We must encourage investment in laying an optic fibre communication network along the railway track. This can provide the backbone for the bandwidth needed for communication network for industry especially new developing areas. The principle of BOT can be adopted for this.

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## **Comments**

**N. Vittal**

### **Objectives**

I think that education also should be looked upon as infrastructure because even though we have an educational system, we are producing graduates who are unemployable. In the section on industrialisation.

Regarding computers and networking, a study may be made of the system adopted in Singapore which is an excellent model for computerisation and just replicate the Singapore model all over Gujarat. As Gujarati is the medium of administration, we should use computers that operate in Gujarati.

### **Problems**

Accept computer generated documents and data for legal purposes and land acquisition act.

### **Recommendation**

Amend the laws so that law does not come in the way of computerisation.

Using external agencies at least in the initial stages for maintenance of computer systems can be thought of.

The recent decision of the Government of India that in the area of land acquisition for a highway, the landowner can approach the court only for the amount of compensation and not get a stay against the acquisition.

Other policies of the Government of India in the highway land acquisition can also be suitably incorporated by the Gujarat government.

### **Action Plan**

The growth in Gujarat has been along the highways characterised by the highway from Bombay to Mehsana. A similar strategy of using the highways for disbursing industrialisation can be adopted. The medium as well as long term strategy should involve laying highways in backward or industrially less developed areas of Gujarat even though there may be no immediate demand for the highways.

The Andhra Pradesh Government recently have come up with the concept of an infrastructure based strategy ;for industrial development rather than industry based strategy. The strategy involves developing massive infrastructure like Vizag port area and using the centres of excellence as the nucleus, use corridors of communication with the major cities of Andhra Pradesh to encourage the flow of investment. Gujarat can also evolve an infrastructure focused strategy.

As regards limitations on labour productivity due to unions and labour legislations in the ports, we should think of special legislation or other methods by which the productivity can be enhanced.

The strategy must be to convert as many of the minor ports into defacto major ports so far as major facilities are concerned. In this the private sector should be fully utilised because the government of Gujarat does not have resources.

A recommendation must be added that as much of private investment as possible



must be encouraged in the power sector. This will mean that the private sector will become not only in generation as well as transmission of power to be decided by the government of India. The private sector will have total freedom to sell the power to any buyer without selling it to the GEB. The basic thinking must be to have a two track strategy so that the GEB caters mainly to the agriculturists and the low paying consumers and power for the industry will come from the private power generators. This in turn will also bring pressure on GEB to modify its strategy and ultimately make its operation viable.

## VIII : INFRASTRUCTURE

Jayshree Shah\*\*

### (A) Power

#### 1. Problem

Insufficient installed capacity to meet 16000 MW of power demand estimated by the end of the century. Assuming that all the ongoing and proposed projects are implemented, there would be still a deficit of 4000 MW in power generating capacity in the state.

#### Recommendations

1. Large scale power plants are required to be set up, preferably in the private sector, using imported coal or LNG as fuel. All sources of non-conventional energy should be exploited fully. However, non-conventional energy sources, such as tidal wave, energy from urban waste, solar energy and energy from bio-gas have limited scope as only small sized power plants can be set up by using those sources. Energy from urban waste for example, requires huge quantity of waste which can only be possible through organisational efforts. Municipal Corporations may produce power through urban waste as shown by "Excel Industry" in Bombay city.
2. Gujarat's potential for wind energy, mainly in Saurashtra and Kachchha is estimated at 5000 MW. The 8th Plan set a target of only 100 MW. This is a viable source of power that needs to be explored fully.
3. Solar energy can be used in the domestic sector and needs to be popularised.

#### 2. Problem

Availability of coal as fuel is a constraint for future power plants in the state. During the Ninth Plan only 10,000 metric tonnes of coal is planned to be produced which can generate 2000 MW of additional power. Moreover, the Railways have limited capacity for coal transportation.

#### Recommendation

To meet the energy requirement of 16000 MW by the end of century, large size power plants are required. Imported coal based power plants may be a solution in the present condition of limited availability of other fuels such as lignite, naphtha or onshore gas. Also availability of Pipavav gas is in an uncertain situation. Setting up wheel mounted power plants by using gas is an alternative. It is being experimented in the state of Assam. Power plants using imported coal as fuel should be a better option for the state in the near future, given the advantage of having a long coastline.

\* Report of the District Level Meeting held on 5-5-1997 at Mehsana.

List of the participants is given in Appendix-I

\*\* Sardar Patel Institute of Economic & Social Research, Ahmedabad.

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**Interview: 8.3**

**Anilbhai Thakkar<sup>1</sup>**  
**B.K. Oza<sup>2</sup>**

**Objectives**

To remove various infrastructural bottlenecks that hinder production and productivity of agricultural, industrial and service sectors of Gujarat.

**Background**

Schemes for replacement of old instruments in communication, accident measures for road transport, improving the facilities of the existing ports, inland river-water-navigation, expansion of godown facilities implementation of different power plants, rural electrification, improvement in transmission and distribution of electricity and development of nonconventional power sources were carried out.

**Problems & Recommendations**

**Administrative bottlenecks**

- (1) Extend e-mail facilities and network at all levels.
- (2) Adopt cost effective transport systems namely shipping services.
- (3) Set up power plants the in the private sector at various regions.
- (4) Identify areas needing air services and frame programs accordingly.
- (5) Adopt appropriate technologies for water harvesting and purification
- (6) People's participation in infrastructural planning.

**A. D. Saramma\***

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1. *President of Chamber of Commerce & Industry, Bhavnagar. He has occupied various positions in Rotary Club, Junior Chamber, District Credit Association, Bhavnagar Sahkari Hat Cooperative Society and District City Unit Congress and is an educationalist.*

2. *Dr. B.K. Oza is Professor and head of the department of commerce, Bhavnagar University and his area of specialization is financial marketing.*

\* *Reader, Dept.of Economics, Bhavnagar University, Bhavnagar.*

Interview: 8.4

Ghanshyambhai Arvindbhai Parikh\*

**Objectives**

- [1] To provide for rapidly increasing demand for all infrastructural facilities, to provide adequate level of investments.
- [2] To meet growing needs of power, roads, ports etc.
- [3] To encourage private and co-operative sector to invest.

**Background**

Infrastructure situation of Gujarat is generally satisfactory, yet, it is proving inadequate in the context of rapid industrialisation and agricultural development. Several corporations assist industrialisation process yet they are not able to cope up.

**Problems & Recommendations**

1. Shortage of power supply 15-20% deficit in power.  
Advance planning needed. Coal linkages must be obtained, transportation be made efficient load factor to be raised, coal exploration to be undertaken in the state.
2. Road system inadequate and inefficient, creating pollution.  
To increase financial allocation, -avoid delays and corruption, enforce anti-pollution regulations, -encourage private sector.
3. Ports less modernised, communications inefficient  
Increase allocation, allow and encourage private sector participation.

**Action Plan**

**Short Term [2-3 Years]**

Devise innovative financial provision for meeting the enhanced need for improvements.

**Medium Term [5 Years ]**

Encourage private and co-operative sectors, - set up new organisations/corporations.

**Long Term [10 Years]**

Frame comprehensive, liberal, practicable infrastructure policy, -set up expert commission.

Tushar Harjivandas Chandarana\*\*

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\* Highly educated, leading Advocate, associated with several voluntary organisations. A social thinker. Age 48.

\*\* Lecturer in Journalism , Amreli.

**Interview: 8.5**

**Anilbhai Dhirajbhai Ruparel\***

**Objectives**

- [1] To meet increasing demand of all subsectors.
- [2] To assure/ensure advance planning of power production.
- [3] To modernize more important roads, ports etc. and to encourage, assist private sector to join the hands with the Government.

**Background**

Subsectors are : (under state jurisdiction)

Power, Roads, Road Transport, Ports, Inland Water Transport, Communication (partly) are generally good. However they are not able to cope up with fast rising demand.

**Problems & Recommendations**

1. Power shortage absolute, higher T.D. losses.  
Effective advance planning of traditional as well as non-renewable sources.
2. Road system inadequate and traditional, serious problems with regard to private operators in passenger traffic.  
More investments urgent. Regularize and Regulate Pvt. operators immediately.
3. Ports modernization process slow  
Encourage private sector on a big scale.

**Action Plan**

**Short Term [2-3 Years]**

Decrease T.D. losses, power thefts prevented, make serious efforts for tidal power.

**Medium Term [5 Years]**

Efforts for exploration of coal in the state needed, speed up Narmada Hydel Power, Appoint statutory 'Power Tariff' Commission.

**Long Term [10 Years]**

Divide state into 2-3 well defined regions for the establishment of powerful, resourceful, Infrastructural Devt. Corp'n' in each region.

**Tushar Harjivandas Chandarna\*\***

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\* Lecturer in Journalism, Amreli.

\*\* Chartered Accountant. Associated with several welfare activities.

### Objectives

- 1 Optimum use of available technology at the village level.
- 2 Emphasis of extending advanced technology should be at the town level to boost up economy and not at the level of rural areas.
- 3 Adequate financial aid.
- 4 Local level government should take keen interest in communication.
- 5 Speedy and concrete implementation of road expansion programme. Time-consuming process results low standard road quality.
- 6 Drainage, adjoining the road, should be taken care of.
- 7 Local conditions like black soil and heavy rain should be taken into account before constructing roads.
- 8 Improper funding time leads to casual, perfunctory approach to construction.
- 9 Ensure rural urban road line on permanent basis.
- 10 State sponsored bus service should increase.
- 11 Road safety measures should be improved. There should be proper Co-ordination between traffic authorities and people.
- 12 Periodical review of road planning and frequent grants for maintenance and repair.
- 13 Necessary vigilance should be explored to tighten road safety.
- 14 Berthing facility at Umbargaon is absolutely perfect, so it should be properly enlarged to cater to the needs of industrial requirement of the state. It will lessen the dependence of this area on other ports like Mumbai.
- 15 Inland water navigation is necessary.
- 16 Advocated privatisation of ports.
- 17 Emphasis on hydro and gas-based power generation to minimise dependence on other states for coal.
- 18 Bio-gas plant should be encouraged on community basis to enable women to have control over it.
- 19 G.E.B. should control power theft.  
Power should reach rural areas to promote agriculture.

Ajay B. Naik'

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\* Ex-Campus Director, Social Worker

\* Lecturer, Rofel College, Vapi.

**Interview: 8.7**

**Anil Marchand\***

**Objectives**

- 1 Development in communication in Gijarat is in the right direction but not up to world standards. Appropriate infrastructure is not available
- 2 Advanced information technology like Internet, E-mail should be made available
- 3 Communication facilities should be improved at the village level. It minimises the immigration of population to the cities.
- 4 The auunal expansion rate of roads is 4% whereas vehicles increase at the rate of 25% to 27%. This increases accident incidence at a very high rate. So attention should be given on road expansion.
- 5 Politics should not interfere in road construction.
- 6 Corruption in any form, in any field should be eradicated.
- 7 Bus facilities are not sufficient. Quality of services should be improved.
- 8 To save time and money four lane high ways should be built on an emergency basis.
- 9 Infrastructure related to transportation should be made the responsibility of the private sector.
- 10 All the villages should hav all weather approach roads to the cities through out the year.
- 11 Road safety measures are not sufficient.
- 12 Government should approach a research institution which provides professional and technical guidance for building roads.
- 13 People are ready to pay higher taxes if better infrastructure facility is made available.
- 14 Surat and Ghogha should be connected by road. It will save 200 to 300 k.m. for Saurashtra bound traffic.
- 15 Umbergaon has good berthing facility. It should be improved, so that it will get good business and dependence rate on Mumbai will come down.
- 16 It is a welcome move to privatise the ports.
- 17 After proper infrastructure, inland water navigation will be successful.
- 18 Heavy dependence on thermal power should come down by increasing hydro electric power generation and gas based energy.
- 19 The potentiality of the industrial and agricultural development can be used to the optimum level only by providing proper power facilities.
- 20 Privatisation of power projects should be seriously considered.
- 21 The Sardar Sarovar Project should be completed at the earliest.

**Ajay B Naik\*\***

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\* President - Vapi Industrial Association.

\*\* Lecturer, Rofel College, Vapi.

## Interview: 8.8

D. A. Shastri\*  
S. R. Shah\*\*

### Background

Infrastructure development is a pre-condition of economic development. Unless we have sufficient power, transport and communication facilities, we can not achieve a fast rate of growth. Transport plays a vital role in the development of the economy. It must provide efficient and reliable transport services. Mostly rail and road transport are important.

Railways have recorded a growth of 4.5% per annum. Road transport also increased by 6.8% per annum. Similarly power-generating capacity also has increased. Despite impressive growth in the spread of the transportation network, a large number of villages lack road facilities.

### Problems

- [1] Inadequate infrastructure : In spite of impressive growth, still the demand for infrastructure is far more than the supply. Demand for power, railways facilities and road transport is more than the supply available. Apart from the quantitative aspect the quality of services is also not upto international standards.
- [2] Traffic-management problem : Especially in urban areas management of traffic is a problem. The number of private vehicles are continuously increasing. Road facilities are increasing at a slower rate, leading to the problem of traffic congestion.
- [3] Increasing number of accidents: In India there is one death due to road accident, every eight minutes. Similarly many are injured. In railways and air crafts also accidents are increasing.

### Recommendations and action plans

- [1] Traffic rules must be strictly enforced. Conditions of roads should be improved. Transmission losses should be reduced.
- [2] Public transport system is very important. Since public transport is irregular and its performance is poor, it is not attractive. If the efficiency of public transport can be increased by better maintenance, people will prefer it, they will not go for private vehicles, which will reduce congestion as well as pollution.
- [3] In cities traffic management can be improved by regulatory measures like one way, reversible lane, exclusive bus lane, Islands, Intersection controls etc. charging more freight during peak hours also can reduce traffic congestion.
- [4] In the long run, we must have more power houses and more roads. Infrastructure development needs huge finance. Hence, time has come to privatise this sector. Foreign capital with appropriate conditions should also be welcome.

P.K. Bhatt\*\*\*

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\* M.E. Civil. He served P.W.D. for 2 years. Also a building contractor. At present he is a Professor of civil Engineering. Prof. Shastri specialised in the area of traffic management and transportation. He has contributed articles in these areas in reputed international journals.

\*\* Mr. Shah is an electronics engineer. He is M.E.(Elect.). He specialises in computers. He is a system engineer in Reliance Petrochemicals.

\*\*\* Reader, Department of Eco., South Gujarat Uni., Surat.



**Interview**

**Jagdish J. Joshi\***

Development of Non-conventional Energy - Solar Energy from Solar Source (Manufacture of Solar Cells and Development of Special Batteries).

Today Gujarat is starved of electric power. With Sardar Sarovar project, hidel power generation would be supplemented but it will also far outstrip the demand. The 21 or 22 medium sized power stations of about 25 to 40 MW and other large thermal power stations under planning in Gujarat will partially alleviate the situation but the demand is growing rapidly - the supply will not catch up with the increasing demand.

Next to Tamilnadu, Gujarat took the lead in setting up wind mills a non-conventional energy (NCE) resource, and it will be in the fitness of things if Gujarat takes the lead in another and more universally available source of non-conventional energy, i.e. solar energy. This will be of immense benefit in the long run.

Today Gujarat can boast of excellent Capital goods manufacturing facilities in private sector which has also good R&D base in the fields of plasma refining, induction melting and heating, specially radio frequency generators and laser cutting.

Japan's most important technological ministry - MITI - has concentrated on the development of low cost solar cells with a combination of above technologies as given in the enclosed extract. Why not assign this tasks of development to such companies who are already in Ahmedabad? Their efforts could be supplemented with some well known NRIs, scientists from U.S.A.

The development of more efficient Galium Arsenide cells can be taken up in the next phase.

Complementary ;to the development of low cost solar cells (of silicon), it would be crucial also to develop concurrently by special light weight batteries for better storage of power for night duty or those to be utilised for transportation in two and three wheelers to cut down the pollution in the cities in the 21st Century.

GIIC with some private sector group should look at getting this technology and develop further to manufacture them at a lower cost. R&D manufacturing efforts for these two most critical products should be placed on a warfooting.

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\* Managing Director, Super & Stainless Hi-Alloys Ltd., Bombay

## **GROUP 9: SUSTAINABLE URBAN DEVELOPMENT**

### **(i) EXPERTS**

Mr. Balkrishna Doshi  
Mr. Trilochan Chhaya  
Mr. Utpal Sharma

### **(ii) RESOURCE PERSONS**

Mr. P K Ghosh  
Mr. Keshav Verma  
Mrs. Annie Prasad

### **OBJECTIVES:**

Prepare 20 year structure plan with 5 year modules containing detailed Master Plan with estimates of resource requirements

Preparation of plan for development of coastal areas of Gujarat

### **Problem**

#### **Coastal Areas**

Prepare detailed plan for coastal areas.

### **Recommendations**

Taking advantage of the longest coastline in the country and promote development of coastal areas by directing private sector investment with matching government investment to develop ports.

Integrate regional planning of coastal areas with port and industrial development.

Linkages with hinterland and container freight stations.

Allocate adequate resources for urban and regional development in coastal areas.

Upgrade infrastructure and improve connectivity by rail and road

Control pollution on the coastline

Promoting tourism by providing facilities for entertainment, economy hotels and developing coastal resorts.

### **Action Plan**

#### **Areas of Concern and Measures**

### **RESOURCE MOBILIZATION**

Budget allocation for Urban Development is extremely inadequate.

### **Short Term Measures**

Manifold increase in the urban sector allocation in the state budget

Strengthening of the Octroi collection mechanisms

Revise and simplify Property Tax formula

Charge Capital Assets Creation Tax for infrastructure development

Incorporate development impact fees in major cities through change in Development Control Regulations.

With State and Public equity create a State Urban Infrastructure Fund which is insulated and autonomous.

Encourage investment in Urban Infrastructure from corporate sector by giving incentives in the form of sales tax exemptions and deferments.

Undertake Techno-Commercial Audit. Costing of services and its details to be published regularly.

Automatic upward revision of tariffs as per agreed economic formula without requirement of any further approval.

### **Medium Terms Measures**

Encourage Municipal Bonds and non-tax revenue generation

Joint Venture Urban Development and Infrastructure projects - BOO's and BOT's with private sector partners.

Commercial Development of potential plots owned by the corporation and procuring large tracts of underdeveloped land for the same, through private public partnerships.

## **CONSERVATION OF RESOURCES**

Conserve Resources at all levels

### **Medium Term Measures**

Allocation of water to Ahmedabad from Narmada to avoid water losses on account of percolation and evaporation

Micro level water management in urban areas. Explore options to save, collect and reuse rain water.

Encourage rescue of treated sewage water for urban areas.

Impose restriction on private use of ground water resources.

## **LACK OF PROFESSIONALISM IN THE INSTITUTIONAL SET UP**

Urban Development Authorities have failed to prove planned growth with proper infrastructure.

### **Short Term Measures**

Give adequate powers to urban development agencies

Infuse professionals and strengthen institutions for speedier implementation of the plans/projects.

Hire experts and consultants for plan preparation and improving systems and project implementation

## **Medium Term Measures**

Give single line authority of planners, city managers and depoliticize municipal cadres

Put professionals at higher level than the administrative bureaucracy.

Upgrade qualifications of professionals already working in the field of urban development and introduce direct recruitment of professionals.

Introduce separate cells in each agency and introduce advanced technologies such as Geographic Information System (GIS) for continuous updating of statistics, maps and other information, along with software for planning and design.

## **UNPLANNED AND HAPHAZARD DEVELOPMENT**

Development occurs before any kind of plan is enforced and infrastructure is laid resulting in skewed distribution.

### **Short Term Measures**

Preparation of Regional, Development and Area plans and mechanisms to ensure its quick implementation before the development starts.

Approval of plan should mean automatic allocation of resources for implementation.

Any plan submitted to government must be cleared and become operational within 6 months.

Get town planning schemes designed by experts with adequate allocation of land for low income groups.

Use of Transfer of Development Rights (TDR) to help conservation of historic and important buildings wherever possible.

Use TDR to provide open space and amenities.

### **Medium Term Measures**

Control dispersal of urban areas by encouraging intensive use of land commensurate with adequate physical and social infrastructure. Also ensure proper infrastructure through use of 'impact fees'

Frame bylaws to encourage low rise high density development and incorporate TDR as integral part of Development Control Regulations.

Set urban form controls and urban design guidelines for important areas.

Review and update (every 5 years) building bylaws; make them detailed, remove discretion, introduce performance specification, introduce transparency and make it time bound.

Ensure adequate parking requirements for commercial and residential areas.

## **Long Term Measures**

Plan New Sub City (Sub CBD) for major cities to decongest the exist CBD.

## **SLUMS**

### **Short Term Measures**

Improve the living conditions by ensuring provision of basic service such as clean water supply, drainage and sewerage system

Encourage corporate sector involvement in slum improvement through income tax incentives to improve slums.

Urban Poverty alleviation program in the city under a Directorate, on lines parallel to DRDA.

Ensure implementation of health programme such as immunization, vaccination, and provision of basic medical care.

Financial schemes for upgradation of the house or building new houses. For this workers residing in slums can be registered with intervention by NGO's and loans can be obtained from financial institutions.

### **Medium Term Measures**

Slum networking and partnership of beneficiaries, corporate sector, NGO's and municipal bodies

Encourage private sector participation through a concept of TDR and floating FSI

Undertake river front development which would address the issue of slums on the river edge.

### **Long Term Measures**

For existing slums : Quick Policy decision to be taken as to the legalizing the status of slum and squatter settlements through tenure rights and/or relocation of slums and squatter settlements.

Prevention of formation of new slums : Land reservations in the new town planning schemes to take care of low income group housing need.

Provide Site and Service Schemes

## **FACILITIES FOR CHILDREN**

Develop a city action plan for children

### **Medium Term Measures**

Location of amenities and facilities in such a way that is conveniently accessed.

Provide high quality schools and amenities or children in collaboration with the private sector.

Create vehicle free pedestrian precincts for safety.

Provide high class sports infrastructure and encouragement sports activities.

## **TRAFFIC AND TRANSPORTATION**

Municipality of traffic modes, inadequate allocation of areas and inappropriate hierarchy of roads create congestion, pollution and conflicts.

### **Short Term Measures**

Undertake comprehensive and detailed transportation studies done for major cities like Ahmedabad, Surat, Baroda and Rajkot.

Widen roads wherever necessary and remove encroachments.

Development of way of roads with adequate provision of foot paths and on street parking.

Simplify public transport routes

Encourage private sector in public transportation in urban areas

Pedestrianise congested commercial areas.

Proper junction designs to smoothen traffic flows

Strict enforcement and deterrent fines for violations of traffic rules and penalties for adequate provision of parking space within the building premises.

### **Medium Term Measures**

MRTS or LRT in major cities to cater to the agglomeration

Encourage public transportation systems in all towns and cities.

Provide multistoreyed parking garages with the concept of pay and park

Allow Parking areas to be built free of FSI

Create pedestrian and shopping entertainment streets

Integrate road layout with topography to reduce costs on provision and maintenance of infrastructure for new areas.

Provide more higher order roads in potential areas for urban development.

Build flyovers and underpasses on important roads.

### **Long Term Measures**

Decongest urban cores from traffic and ensure proper road and transportation plan for future areas to be covered by development.

Form a simple and clear cut pattern of major road network for all urban areas.

Increase densities along arterial roads for easy access and efficient use of public transport and charge impact fees for high intensity development.

Create a network of public transport along with spaces for cyclists and pedestrians in large cities especially for newer areas.

Promote intercity commuter rail and bus corridors with integrated urban development

Decongest urban areas by developing large network of major roads to open up the hinterland.

Encourage private sector provision of roads with adequate incentives for real estate development.

### **LACK OF CIVIC SENSE**

Inculcate civic sense and respect for cleaner cities

### **Short Term Measures**

Intense media campaigns

Education programmes to abide by the traffic rules, civic duties, cleanliness, conservation of water, check pollution etc.

Incorporate concepts of health and civic sense in school curriculum

### **URBAN ENVIRONMENT**

Increasing levels of pollution (air, water, land, noise) lack of green areas, inadequate/non-existent waste disposal systems and disposal of untreated effluent from industries are degrading the urban environment.

### **Short Term Measure**

All cities to conduct hazard impact studies regarding pollution contributed by vehicles and industry.

Install emission checking stations in the city to enforce standards (through private sector)

Erect air quality monitoring stations at traffic junctions and at industrial estates.

### **Medium Term Measures**

Control solid waste disposal and inefficient site management

Conversion of waste into energy

Monitor quality of underground water resources, recycling of waste water and ground water recharge.

Introduce urban forestry and establish city forest units in large cities.

Develop mechanisms to increase open space allocation. Develop open space through pay and use concept. Also create some vehicle free streets for pedestrians and shoppers.

Encourage people's participation in the provision and maintenance of urban basic services to improve the quality of the environment.

## **QUALITY OF CITY LIFE**

### **Medium Term Measures**

Undertake studies regarding competitiveness of cities in terms of quality of life and environment

Studies related to spatial variation of quality of life to be undertaken

Match local plans with environmentally deficient areas.

People's participation in maintaining local environment

Massive tree plantation programmes through help of NGO's and people

### **Long Term Measures**

Upgrade, conserve, restore and renew heritage zones.



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## Comments

**Annie Prasad\***

### Recommendation

Public-Private Partnerships (PPP) may be the solution for the slow pace of urban development. Models for PPP for projects for New Townships as well as for integrated scheme for water supply, drainage, roads and bridges, street lighting, etc., have to be developed.

To accelerate urban development with the co-operation of major stake holders, forum should be provided for involvement and participation of associations of realtors and architects & experts.

### Action Plan

The 74th Constitutional Amendment casts mandatory duty on the State Government to set up :

Metropolitan Planning Committee (MPC) for integrated development of large cities.

District Planning Committee (DPC) to integrate the planning of urban and rural areas.

Ward Committees in cities & towns

These should be implemented during the current year.

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\* *Principal Secretary, Urban Development & Urban Housing Department, Sachivalaya, Gandhinagar*

### **Problem**

Resource mobilisation and conservation budget allocation for urban development is very inadequate (only 0.8% of state's budget despite 35% living in urban areas)

### **Recommendations**

- Manifold increase in urban sector allocation
- Change Capital Assets Creation Tax for infrastructure development.
- Incorporate land-use, planning and impact fees.
- Encourage Municipal Bonds and non-tax revenue generation
- Create with state equity a State Urban Infrastructure Fund which is insulated and autonomous
- Encourage investment in urban infrastructure from corporate sector (by giving incentives in the form of sales tax exemptions and deferments)
- Costing of services and details to be published and compared (techno-commercial audit)
- Automatic upward revision of tariff as per agreed economic formula.

Property tax Reform. Rationalisation of Octroi and Users Charges.

Rationalisation of property tax based on a simple common module with area based transparent self assessment has been worked out and needs to be adopted. Similarly account based collection and valorem schedule of rates, uniform band of minimum and maximum rates, decentralisation of procedures are under consideration for octroi. State Finance Commission and financial strengthening of smaller ULBs with devolution of funds and identification of new sources of taxation.

(The problem focus of the Group is on the Budget, which needs to be widened).

### **Problem**

Resources being wasted

### **Recommendation**

Commercial development of potential plots. Conserve resources at all levels e.g. prevent water loss due to percolation and evaporations as the water is released from the Dharoi Dam and has to travel a long distance for reaching Ahmedabad city. Instead use the water of Dharoi Dam for the immediate surrounding areas and allocate water supply for Ahmedabad from Narmada canal which is passing by the city.

Water supply system with use of non-potable water/sea water for non-drinking uses may be added.

Encroachment on public land.

### **Problem**

Professionalising the institutional set up Urban Development authorities have failed to provide planned growth with proper infrastructure.

### **Recommendation**

There is a need to infuse professionalise and strengthen institutions for speedier implementation.

Upgrade qualifications of professionals already working in the field of urban development and introduce direct recruitment of professionals.

- Create single line authority of planners city managers and de-politicise municipal cadres.
- Hire experts and consultants for improving systems and project implementation.
- Introduce Geographic Information System (GIS) for continuous updating of statistics, maps and other information, along with software for planning and design.

City Managers Association of Gujarati/networking for municipalities and best practices for municipalities.

Project implementation cell for guiding municipalities.

Urban Infrastructure Development Corporation on the lines of the Tamilnadu.

Key focus on Urban Infrastructure as it improves urban productivity and states economic efficiency.

### **Problem**

Planned Development

### **Recommendation**

- Prepare regional and area plan with legal framework with long term policy enunciation by the Government.
- Control dispersal of urban areas by encouraging intensive use of land commensurate with adequate physical and social infrastructure.
- Review and upgrade (every 5 years) building bylaws, make them detailed, remove discretion, introduce performance specifications, introduce transparency and make it timebound.
- Upgrade, conserve, restore and renew heritage zones. Highlights potential for tourism. Use transfer of Development Right (TDR) to help conserve historic and important building wherever possible, use TDR also to provide open space and amenities.

Vertical development for slums on prime land.

Planned development for housing - restructuring of Gujarat Housing Board activities.

Constitution of District and Metropolitan Planning Committees.

- Plan new city centre (CBD). Whenever possible take up river front development.

Required major policy intervention. Options are:

- Slum networking and partnership of beneficiaries, corporate sector, NGO's and municipal bodies (beneficiaries are willing to contribute if the package is credible and efficiently delivered).
- Encourage private sector participation through a concept of TDR of floating FSI
- Encourage corporate sector involvement through sales tax incentives to improve slums.
- Bring urban poverty alleviation programme in the city under a Directorate on lines parallel to DRDA.

### **Problem**

Attention to children while developing activities

### **Recommendation**

- Develop a city action plan for children; include lessons on civic sense in the syllabus.
- Provide high class sports infrastructure and encourage sports activities. Locate talent and help upgrade skill and technique.

Neighbourhood committees and CDS network with immunisation of NHCS to cover all slum pockets.

Focus on school enrollment, immunisation, nutrition, sanitation and health hygiene.

Budget provision for NHCs from Municipal Corporation/Municipalities.

Health convergence activities with paramedic training to range to voluntary workers including anganwadis to improve health coverage in slums.

Individual toilets for clusters of 2-3 families.

### **Problem**

Civic sense

### **Recommendation**

Develop high intensity media and other education programmes to standardise response of the citizens regarding traffic, civic duties, cleanliness, conservation of water, need to check pollution etc.

Community participation - organisation of NHG

Ward committees 74th Constitutional Amendment Act.

### **Problem**

Traffic and transportation multiplicity of public modes and inadequate allocation of funds and inappropriate hierarchy of roads create congestion pollution and conflicts problems already virtually out of control.

### **Recommendation**

- MRTS or LRT in major cities to cater to the agglomeration
- encourage bus transportation system in all towns and cities.
- increase densities along arterial roads for each access and efficient use of public transport.
- strict enforcement and deterrent fines for violations of traffic rules and inadequate parking provisions within the building premises.
- Provide multilayer parking : Garage with the concept of pay and park.

Land use and transport plans for all cities over 1 lakh population.

Urban Transport Development Fund and LRTS planning for Ahmedabad, Surat & Vadodara.

### **Problem**

Urban Environment

### **Recommendation**

- All cities to conduct Hazard impact studies regarding pollution contributed by mobile sources and industry.
- Control solid waste disposal and inefficient site management (Convert bio-degradable waste into bio-fertilizers and growth accelerators).
- Install emission checking stations in the city to enforce standards (through private sector)
- Erect air quality/monitoring stations at traffic junctions and at industrial estates.

Standardise minimum level of solid waste management practices across all ULBS, Rs.150 crores for sanitation in 9th five year plan for municipalities.

- Monitor quality of underground water resources, recycling of waste water and groundwater recharge.
- Introduce urban forestry and establish city forest units in corporation cities.
- Development mechanisms to increase open space allocation wherever possible. Develop open space through the concept of pay and use. Also create vehicle free streets only for pedestrians.
- Encourage people's participation in the provision and maintenance of urban basic services to help improve the quality of the environment.

## IX. SUSTAINABLE URBAN DEVELOPMENT

A.S. CHARAN\*\*

Sustainable urban development implies improvement in the quality of life of urban dwellers over a fairly long period of time. Sustainability and growth rates are directly related. In India certain cities are growing rapidly while others are decaying. Objectives of sustainable urban development should be:

1. To arrest degradation of urban environment and to maintain quality of life.
2. To prevent slowing down of urban activity. This conflicts with the first objectives and so a compromise is needed.
3. To maintain social cohesion, which is adversely affected during the process of urbanization.
4. Religions, cultural, historical identity of a city should be maintained.

The subject is divided into five major areas.

(a) Traffic and transportation (b) law and order (c) urban environment (d) slums and unplanned housing (e) professionalization of institutional set up including local finance and social infrastructure.

1. Urban centres have grown rapidly because they provide immediate employment. People from all the states flock to the cities creating unbearable burden on civic facilities and also leading to social imbalances.
2. In a developmental process, when a programme is implemented for a section of the society, its adverse effect on others should be avoided. For instance, solid waste is collected from cities and dumped in the nearby villages. Thus surrounding areas have to sacrifice in many ways and bear a degraded environment. Industrial development in peripheral areas is also critically important so as to avoid problems of traffic and transport. In short "manageable" size of a city leads to sustainable urban development. This requires a "total" plan where urban-rural interdependence is taken into consideration.
3. Employment of local people should be made compulsory to minimize influx from other parts of the country. As far as possible, the area of the city should not be increased.
4. The government should not take recourse to "populist" measures. There should be some regulation of slums and hawkers. Similarly there should be traffic and pollution regulations also.
5. As far as traffic and transport are concerned, the "Motor Vehicles Acts" are completely outdated now. They should be revised in consultation with persons who implement them, e.g. mini buses or tempos may be permitted to ply within a city. More awareness should be created among general public regarding the traffic rules.

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\* Report of the District Level Meeting held on 20-4-1997 at Surat

List of the participants is given in Appendix-I

\*\* Professor, Department of Economics, South Gujarat University, Surat.

6. It was suggested that help of those who are not earners (i.e. children and retired people) may be taken to create awareness and to change the attitudes of the people.
7. At present there is no national policy on urbanization. Whenever one thinks of development of a city, its hinterland should also be considered. Also while planning, one should think of the future generation.

Maintenance of a facility is as important as creation of a facility.

8. Among the Municipal Corporations in Gujarat State, Ahmedabad spends 45% of its budget on administration (i.e. salary etc.) and Surat spends only 31%. The balance of the outlay is available for capital works.
9. It is suggested that unit rates should be calculated for repetitive works, so that the civic body does not have to calculate the cost for various zones separately.
10. Even poor people would like to get better services with a small payment rather than free but useless service. In this connection it is proposed to start more "pay and use" type of services.
11. The civic tax structure in the cities has remained the same for a long time. Increase in tax rates is the need of the hour in order to meet the increasing cost of providing civic services.
12. The Municipal Corporation may float "Municipal Bonds" on the lines of public sector bonds to mobilize more funds.
13. Privatization in the field of infrastructure development and cooperation of NGO in the sphere of social infrastructure development is necessary.
14. New technologies are coming up for controlling pollution and for waste management which should be implemented as far as possible.
15. The importance of capital projects for creating infrastructural facilities and their management is a key area for Municipal Administration

## 9. SUSTAINABLE URBAN DEVELOPMENT

Ranjan Munshi\*

### Objectives

- Integrated development of small and medium towns/cities.
- Housing development for lower income groups
- Renovation of old buildings
- Long-term planned urban development

### Background

Haphazard and uneven development of cities/towns - growth of satellite towns and peripheral towns - pressure of population especially floating population -various housing development and employment schemes launched and progress made to a certain extent.

### Problems & Recommendations

1. Emergence of unorganised unauthorised residential, commercial complexes due to lack of well defined town planning schemes.
  - Strengthen Town Planning Schemes with proper vision - develop town planning schemes at the micro level.
2. Psycho-sociological problem of housing development schemes-those likely to be displaced do not want to give up their identity - lack of time frame.
  - New schemes in concurrence with the low income group-commitment on the part of planners and policy makers .
3. Old buildings [culture and heritage value] neglected and lack renovation and maintenance.
  - Urban Art Commission to be set up which defines the skyline of the city reduces haphazard mushrooming of buildings - international funding required.
4. Lack of dispersal of population - migrants and residential-increases pressure on urban centres of growth.
  - Encourage satellite and peripheral towns.

### Action Plan

Professional bodies like universities must take up vision 2000 - Master Plan - collaboration with urban development authorities and BMC-Urban development must not be left to anybody and everybody-concerted effort to unite government and private professional bodies or individuals.

### Resources Needed

Minimum Rs.300 crores for urban development and integrated development of nearby villages/towns/cities especially roads and heritage.

Ashir S. Mehta\*

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\* Secretary General, Federation of Gujarat Industries (FGI) Former Head, Principal and Dean of Arts College, Ahmedabad-Visiting Professor, Education and Psychology, Gujarat University-Former Manager, Indian Express

\*\* Department of Economics,, Faculty of Arts, The MS University of Baroda, Baroda.



**Interview: 9.2****R.S. Gandhi \*****Objectives**

- Computerisation of property records, City surveys and villages.
- Housing development for lower income groups
- Renovation of old buildings.
- Scheme for employment of underemployed and unemployed.

**Background**

Urbanisation mainly due to migration of population from rural to urban areas as well as other parts of the country-changing growth pattern in size and class of cities / towns - haphazard and uneven dwellers quality of life of urban developers adversely affected urban diffusion through industrialization in backward areas on the fringe of major urban centres.

**Problems & Recommendations**

1. Conversion of fertile land to non-agricultural activities through industrialisation and residential development at an alarming rate.

Industrial activity should be diverted towards areas in Panchmahals

2. Lack of integrated development of peripheral small and medium towns/villages.  
(1)-Identify urbanisable area- (2) stress on development of cities/towns not only within VUDA limits but also those outside the limits. (3) Funds from infrastructure board to be diverted to these towns-comprehensive development plan needed-planning with infrastructure.
3. Employment and Settlement
  - Industrial policy should be so devised as to give incentive to industrial development in small and medium towns instead of focusing alone on backward districts
  - This will solve the employment problem automatically.

**Action Plan****Short Term [2-3 Years]**

Comprehensive development plan for water supply, drainage, electricity and roads for urbanisable areas identified up to 2001-to be implemented immediately/during the 1st phase of the 9th plan.

**Medium Term [5 Years ]**

No big industries should come up within the radius of 25 kms of urban cities/towns-policies to be revamped to suit modern needs.

**Long Term [10 Years ]**

Comprehensive Traffic and Transportation plan up to 2011 -State Planning Board for overall comprehensive planning.

**Resources needed**

Rs. 1500 crores [including urban development with development of infrastructure].

**Ashir S. Mehta\***

- \* B.Arch. AIIA, Diploma in Planning AITP Deputy Town Planner-Serving VUDA undergone course in Mass Transport System at DPU London - Worked on Surat Development Plan, revised VUDA Development plan - 10 years experience in Saurashtra.
- \* Lecturer, Department of Economics, The M.S. University of Baroda, Baroda

**Interview: 9.3**

**Bhavanben Joshipura\***

**Objectives**

1. Administrative change in self-government
2. Migration flow and urban planning
3. Minimum need planning of the city

**Background**

Administrative change supportive to urban growth

**Problems & Recommendations**

1. Pollution and Traffic regulation  
Pollution awareness education
2. Public Health and Education  
Public awareness education
3. Water and Drainage Planning in efficient way  
Funding from external sources for the corporation

**Action Plan**

**Short Term [2- 3 Years]**

Efficient Water Management Drainage and Slum Clearance

**Medium Term [5 Years ]**

Widening of Roads and Clean City, Health and Sanitation

**Long Term [10 Years ]**

Perspective Plan of Cities

**Issues**

- [1] What are the major problems of Rajkot Municipal Corporation as you were Mayer?
- [2] Which type of schemes, you suggested to get finance from other agencies to fund capital projects for urban growth?
- [3] How did you co-ordinate executive committee leaders of corporation for developmental programme?
- [4] What course of action taken by you for women as you were woman Mayer?
- [5] Your suggestions about growth of Rajkot City in 9th five-year plan.

**Problems**

- [1] (a) Drinking water supply  
(b) Drainage connection and planning  
(c) Endowment of resource from state government and institutions  
(d) Mis-management of municipal schools

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\* Advocate, District Woman Mayer of Rajkot City.

- (e) Problems of scavengers due to privatisation
- (f) Town planning of city with widening of roads, traffic and parking places.
- [2] We made proposal to Gujarat Municipal Finance Board, Central Government as well as World Bank for Urban Planning Capital projects.
- [3] At local self government organisation like Municipal Corporation, I had to keep active liasion to convince leader problems and schemes suited for our corporation to get them passed through different committees. First of all, officers were asked to prepare schemes of development then they were modified in the light of discussion. I had a problem in committee as coalition of houses to widen main roads and police department helped to resist against mob which was aggressive.
- [4] As I was woman Mayer, I almost gave up my Advocate ractice, devoted full time to corporation and developmental activities. For working Women Hostel was constructed, Nursery Centre for children of working women, Adult Education Programme for illiterate women in remote areas of Rajkot City. It is my personal view as Woman Mayer or President of self-government, bureaucracy can eat away leaders like us.
- [5] I can suggest following action plan in 9th plan for Rajkot Municipal Corporation.
  - (a) Connecting Rajkot Water-catchment area with pipeline of rivers of South-Gujarat.
  - (b) Rehabilitation of Slum-dwellers in Rajkot city in order to save land-grabbing.
  - (c) Shifting of Industries of Bhaktinagar area to outside Rajkot as more unit located in residential areas.
  - (d) Modern instruments for solid-waste disposal and public sanitation.
  - (e) Master Plan for Rajkot as Clean and Green City.

**B.M. Jani\***

**Interview: 9.4**

**P.P. Vyas\***

**Objectives**

1. Clean water to city
2. Solid waste management
3. Drainage facilities in urban area

**Background**

No change suggested in existing pattern

**Problems & Recommendations**

1. Scarcity of water in the city  
Linking Rajkot with Mahi and Narmada rivers
2. Shortage of funds for infrastructure  
Privatisation of urban management
3. Management in urban affairs  
Training to the manpower corporation.

**Action Plan**

**Short Term [2-3 Years]**

Raising of resources for development by additional taxation - drainage deposit

**Medium Term [5 Years ]**

Fund raising through financial institutions like Gujarat Municipal Finance Board, IDBI for Urban capital projects

**Long Term [10 Years ]**

Shifting of slums from city - shifting of small industries from city industrial area

**Resources Needed**

For mobilisation of resources HUDCO, World Bank, Japanese Collaborative projects and Urban Development Ministry of the centre to be contacted

**Issues**

- 1] How do you manage expansion of roads in Rajkot? Criteria for compensation payment?
- [2] What is your plan to meet growing requirement of water supply for drinking purpose in the city?
- [3] What steps have you taken to meet rising expenditure of drainage expansion in the city?
- [4] How do you fund your above said capital projects? When do you get refinance?
- [5] How is privatisation process useful in disposal of solid wastage?
- [6] What is your plan for manpower planning in local self-government body like R.M.C.?

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\* Civil Engineering Training at Sweden for Waste Management of Municipal Corporation

## Recommendations

- [1] We have estate committee and road expansion committee to take decisions. As per Bombay Municipal Act Compensation is paid, and legal actions are taken for land encroachment and land-grabbing. Our staff and police administration's helping are for successful coalition operation for road expansion.
- [2] We are planning to get share from Narmada Sardar Sarovar project and World Bank project to meet long term need of water for the city.
- [3] For rising drainage expenditure, we mobilised finance from beneficiaries through deposits, and funding from HUDCO.
- [4] Project Finance, we prepare technical reports through Tata Consultancy and submitted to the World Bank. We also received financial support from the government, Municipal Finance Board.
- [5] For effective privatisation process, we introduced private contract system for disposal of solid waste. No recruitment of scavengers is stopped by the corporation to reduce the size of expenditure.

In future even for maintenance of pipeline for drinking water and drainage, we are planning to introduce private contractors. It is beyond the reach of the Corporation to maintain big staff.

- [6] For manpower planning, different types of training are given to officers and office-bearers of the corporation. Rank and line management technique is used. We introduced Computer system for payment of local taxes as the staff is inadequate during the collection period. One-third direct recruitment of officers and two-thirds are promoted. Computer training is given to accounts staff in order to prepare systematic account maintenance record of tax payers.

**B.M. Jani\***

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\* Reader in Economics, Saurashtra University, Rajkot-5.

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**Interview: 9.5**

**Niranjan Vyas\***

**Objectives**

Urban Planning to maintain quality of life with respect to basic facilities in urban areas of the state.

**Focus**

Socio-economic development of the areas through integrated approach.

**Background**

- [1] Urbanisation is very fast in Gujarat.
- [2] Urban areas face problems like inadequate water supply, poor sanitation environment degradation, traffic congestion

**Problems**

- [1] Participation of the people is very little.
- [2] All the members of the board do not visualise the importance of the Town Planning.
- [3] People are not well aware of the different schemes under U.C.G.
- [4] Slum areas are growing fast and M.N.P. is insufficient to curb all.

**Recommendation**

- [1] People should be made more conscious for Urban development and Town Planning.
- [2] Urban Development Authority board should be more broad based and experts of the subject must be nominated.
- [3] All the concerned authorities of Urban Planning should be made responsible for their role.
- [4] Monitoring of the schemes must be done by citizen council.

**Nila B Oza\*\***

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\* Senior Citizen of Bhavnagar and Ex-Chairman of BADA

\*\* Department of Economics, Bhavnagar University, Bhavnagar.

**Interview: 9.6**

**Kashyap Priyakantbhai Joshi\***

**Objectives**

- [1] To formulate comprehensive, workable urban policy and devise programmes based on this.
- [2] To arrange for adequate essential services for all urban population.
- [3] To reorient urban management and to promote greater participation of the private sector, non-governmental agencies and community organisations.

**Background**

There are more than 300 towns and cities, unplanned growth, increase in slums, increase in urban poverty, decline in quality of urban life, shortage of housing and inadequacy of all urban services including water supply, urban situation is in bad shape.

**Problems & Recommendations**

1. Unplanned rapid urbanisation. Effective urban policy needed.
2. (a) Deficiencies in all urban services. (b) Inefficient functioning of local institutions.  
Services to be expanded and delivery system to be improved, institutions to be strengthened in light of 74th Amendment.
3. (a) Slums increasing and slums poverty.  
(b) Lack of implementation of urban development policy. Eradication of urban poverty programmes to be expanded and revamped

**Action Plan**

**Short Term [2-3 Years]**

Introduce necessary changes in urban development policy and enforce present rules and regulations.

**Medium Term [5 Years]**

Set up "permanent urban commission" to continually review urban policy and programmes and advise the government and local bodies.

**Long Term [10 Years]**

Evolve modern management of towns and cities, devise effective urban land policy.

**Subhaschandra Shankarlal Nayee\*\***

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\* Youth leader and lawyer. Literary personality, organiser of youth and women interested in social causes.

\*\* Lecturer in Psychology.

**Interview: 9.7**

**Navalkant Laxmishankar Joshi\***

**Objectives**

- [1] To achieve balanced urbanization and modernize urban management.
- [2] To strengthen urban services and raise resources.
- [3] To avoid unplanned urban development and improve conditions in slums etc.

**Background**

Gujarat has higher urbanization-number of towns, cities are more than 300. Real problems of services, employment, slums, poverty etc.

Gujarat lacks comprehensive urban development policy - No effective urban land-housing policy etc.

**Problems & Recommendations**

- 1. Checking of unplanned urban development.  
Enforce relevant laws, amend laws, frame policy on "New Townships"
- 2. Improving, strengthening urban services etc.  
Activate local self government institutions - make them "accountable"
- 3. No adequate urban policy, land-housing policy, Inadequacy of resources.  
Set up permanent "Urban Commission"  
Development of citizens' groups.

**Action Plan**

**Short Term [2-3 Years]**

Enforce laws, amend laws to regularise urban growth, supervise local bodies, motivate them to use untapped taxes etc.

**Medium Term [5 Years]**

Comprehensive Urban Policy, land-use policy housing policy needed. Policy on new Townships.

**Long Term [10 Years]**

State to allocate more funds for local bodies, Better formula needed, educate members/office bearers of bodies.

**Resources Needed**

Use un-tapped taxes/sources - avoid corruption - revise tax rates where very low, State Government must allocate more funds to local bodies, Do not starve them, Allow them freer borrowings.

**Subhaschandra Shankarlal Naye\***

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\* Social and spiritual thinker retired High School Principal, Social Activist, interest in for development of Children and Youth, spreads ideas on Urban Development, Founder Chairman "Shri Aurobindo Society in Amreli."

\*\* Lecturer in Psychology.



## Interview: 9.8

Dalvir Sikligar\*

**[A] Problems**

- [1] Looking to the increasing trend of urban population, the future needs of water supply, drainage, electricity, roads etc. are underestimated. Therefore, municipal authority is not able to provide all these facilities at the appropriate time and adequately. Short-term planning is not useful considering the increasing trend of urban population.
- [2] To a great extent, unauthorised unplanned construction works are going on in urban areas. No body is checking the construction work of private builders or the construction work which is being done without taking municipal permission or the construction work completed beyond the permission given. The permission is given to unauthorised construction works latter on, under the illegal monetary transaction by the officer of the municipality. This unauthorised and unplanned construction works obstruct construction of new roads and widening of old roads.
- [3] In city survey office, corruption is going on a large scale. No entry is being done of the immobile properties like land transactions and house in the register without giving bribe. Property records are not properly maintained by the city survey office. Therefore people face difficulties in getting other monetary benefits based on the documents given by the office regarding properties.
- [4] There is a lack of vision among the planners and administrators of the city survey office and town planning regarding sustainable urban development. The officers and planners of the offices of the city survey and town planning always think in terms of short term planning and short-term gains. As a result a well planned urban development becomes impossible.
- [5] On account of the lack of entry of the properties in the city survey register and in the register of office of Gram Panchayat, both municipality and Gram Panchayat are losing revenue in the form of various taxes, like property taxes - a house tax.
- [6] The construction work of residential houses by the HUDCO for lower income group is going on very slow and of poor quality. The problem of residential accommodation is becoming very complex and acute day by day along with the increasing urban population.

**[B] Remedies or Solutions**

- [1] There must be long-term planning regarding future needs of roads, water supply, residential accommodation, electricity etc. considering the rapidly increasing urban population.
- [2] In order to avoid malpractices in the city survey office and Gram Panchayat office, the procedure of making entry of the properties in the register must be made very simple. Maps of the city and villages must be made up to date, so that the exact location of the property can easily be traced out.
- [3] In order to avoid the cost of demolition of the unauthorised construction in future and to make beautiful development of the city, illegal construction work should not be allowed in any way.

\* Mr. Sikligar is B.Sc. B.T. (Bombay) A retired Principal of the High School, an active social worker, thinker and classical musician

[4] To prevent the migration of rural population towards the city or urban areas there must be decentralisation of certain business and industries. This will help in two ways. First it will reduce the pressure of population in urban areas and thereby it will reduce the intensity of the problem of urban employment. More and more computer training centres can be opened in the surrounding areas of the city.

**[c] Action Plan**

To implement all these measures, both short-term and long-term planning are needed. So far as short-term planning is concerned the housing construction work by HUDCO must take place very fast, so that the problem of unemployment can be solved to some extent. Long-term planning is required with respect to increasing need of water supply, drainage system, roads, electricity etc.

**[D] Resources Needed**

There are two ways to raise the resources needed. First by gradual increase in municipal taxes and by getting grant from the State Government.

**I.S. Desai\***

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\* *Lecturer in Economics, Shah N.H. Commerce College, Valsad.*

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**Interview: 9.9**

**Ashok Shah\***

- [1] Development policies including sustainable urban development must be formulated from the view of national interest rather than interest of certain individuals of political parties.
- [2] Production of any chemicals or pesticides or drugs not allowed in Western countries should be banned for production in our country. This is required for sustainable growth of the country and to see innocent smile on the faces of our Third Generation. "Cow, Village and Neem" will bring the prosperity and national character of India.
- [3] Indian scientists, technologists and experts in various fields of the economy should be given proper opportunities and recognition rather than so called foreign experts. With a few exceptions, foreign experts can be used in certain fields only.
- [4] A country with the highest level of intelligence, resources, manpower and agricultural land should not remain backward for long and can become leader of the world provided we have honest leaders from the level of "President" to "People" ie. at all levels, national interest should only be the criteria at present and in years to come.

**I.S. Desai\*\***

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\* Ph.D.(Micro/Biotech)

\*\* Lecture in Economics, Shah N.H. Commerce College, Valsad.

Interview: 9.10

Navinbhai J. Raval \*

## Objectives

### Problems & Recommendations

1. Urbanisation is fast, but without adequate infrastructural development.  
Infrastructural development should be faster and pre-planned.
2. (a) Bottleneck of highway roads, (b) Railway stations are very narrow and small.  
Marine Transport to solve environment problems. With the pace of urbanisation Road-Railway bottleneck should be removed and developed accordingly
3. Other infrastructural problems  
(a) Natural gas facilities should be given to industries so that environmental problems will be eased.  
(b) Postal services should be developed.

### Action Plan

#### Short Term [2-3 Years]

Cooperation between the Centre and State Government is required for Gas-Railway-Road-Natural Gas

#### Medium Term [5 Years ]

International Airports should be developed and connected with Metro cities of the World

#### Long Term [10 Years ]

Marine Transport should be developed Harbour transport from Surat to Bhavnagar should be introduced. Joining water ways, townships should be developed in periphery to reduce the stress of people on city area Tourism places should be developed in Gujarat by giving subsidies to the private sector.

G.N. Joshi\*\*

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\* M.A.M.B.A.(USA)(Mafatlal group) Gujarat Gas Company Ltd. Diamond Nagar Group of Companies. Group Chairman-Southern Gujarat Chamber of Commerce and Industry. Ex-Senior Executive : Atomic Energy Department Government of India, Advisor - Baroda Rayon Corporation Limited. Navin Flourine Industries. Gujarat Gas Company Ltd. Diamond Nagar Group of Companies

\*\* Reader in Economics, South Gujarat University, Surat.

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Interview: 9.11

Gautambhai U. Vyas\*

**Problems & Recommendations**

1. Railway bottlenecks

It should be four track and electrified from Surat to Bhusaval.

2. Financial problems for road development

Timely financial resources should be released for the expansion of roads.

3. No subsidies zones for industrialisation

More subsidies zones should be declared to reduce agglomeration of urbanisation in Gujarat.

**Action Plan**

**Short Term [2-3 Years]**

Financial assistance should be released in time for road development and infrastructural development

**Medium Term [5 Years ]**

Four Track railways and its electrification is required

**Long Term**

Subsidies zone should be declared in various backward areas of Gujarat

G.N. Joshi\*\*

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\* Advocate,  
President Nagrik Sahkari Bank, Bardoli

\*\* Reader in Economics, South Gujarat University, Surat.

## GROUP 10: WOMEN AND EMPOWERMENT

### (i) EXPERTS

Mrs. Anna Malhotra  
Mrs. Ilaben Joshi  
Mrs. Kokilaben Vyas  
Dr. Ashok Desai

### (ii) RESOURCE PERSON

Mrs. Anuradha Mansinh  
Miss Meena Bhatt  
Mrs. Sunayna Tomar

### OBJECTIVES:

Achieving gender equality in all spheres of life.

### BACKGROUND:

1. Equal opportunities in
  - education
  - employment
  - legal rights
  - property rights
  - political participation
2. Enable women to participate in decision-making process at all levels.
3. Creating awareness for
  - handling economic matters
  - handling administrative matters
  - health
4. Sharing of domestic responsibilities between men and women.

### PROBLEM

Need education for effective leadership

Need motivation for small family

### RECOMMENDATIONS

Use modern technology like Video, Audio, multi-media for training.

Following rules for contesting election at any level: She should have acquired at least primary education. She should not have more than two children before contesting or while in office.

## X. WOMEN'S EMPOWERMENT

Nila Oza\*\*

1. Effective leadership: Women are given reservations in the political system. To make it effective they must be trained to feel confident with respect to procedures of working, legal rights and our political system. Training needs of different groups can be worked out.

To train female members for the Gram Panchayat, Zilla Panchayat and other Agencies, the University is a proper institution. A special cell can be attached with all the universities of the State. This cell can also undertake other awareness raising activities for the students and other groups of the area. The cell can work as a counseling centre for NGOs also.

2. Effective implementation of Minimum Needs Programme should be a priority.

Family cards for all the poor families of the village should be introduced. Details of the members must be maintained. Basic needs of these families must be fulfilled.

3. Size of the family: Social factors are also affecting the size of the family. Inter connection of socio-economic factors for different socio-economic groups may be worked out to arrange for dialogues.

Proper child and mother care is also needed. There is a need to unveil the reality that all male children are not ready to undertake responsibilities of old parents and other family members.

Awareness raising programmes are required and ladies and gents both should be invited.

4. Self Employment for Women: At present there is a "scheme for women entrepreneurship" which requires two guarantors and a copy of ration card. It takes a long time to provide finance. It is suggested to adopt simple procedures. Instead of guarantors, hypothecation of goods or assets is recommended. In certain cases, the requirement of ration card is not possible to be fulfilled. Alternatives should be worked out.

Establishment of a cell at district level for bankable loan is also suggested. The cell is required to work as a nodal agency.

Women Entrepreneurs should be given specific tax concessions.

Specific days should be fixed for clearing loan cases, so that applicants may approach accordingly.

Short term courses in management training by Mahila Arthik Nigam for women entrepreneurs need to be offered.

\* Report of the District level meeting held on 13-4-97 at Bhavnagar  
List of participants is given in Appendix-I

\*\* Department of Economics, Bhavnagar University, Bhavnagar

Minimum level of income for applicants must be raised. Members of lower middle class should be considered for the purpose of loan.

Network for marketing the products of women entrepreneurs is needed. At present we do not have flexible system regarding hours of work for women in view of their family responsibility. This should be worked out by a special group of experts.

5. Improvement in status of women: Awareness raising programmes are required at local level.

Role of women in social life and specifically in earning of the family must be made visible. Women are working in agriculture and traditional occupations, their contribution should be studied and people should be made aware of it. Role of women in household management also needs a recognition.

6. Equal property rights: Legal rights are provided by the constitution but women are not aware of them. Existing social systems are more powerful. Awareness raising programmes and counseling are required. Universities, Bar Associations and NGOs should be given more responsibilities.

7. Female literacy: This requires greater initiative by the NGOs. They should be provided more resources and autonomy in work.

'Ratrishala' in rural areas is an excellent alternative. 'Ratrishala' is giving good results in Maharashtra. Students must be encouraged to work during vacations for this nation building activity.

8. Crime against women:

1. Family court should be established.
2. At the time of noting of a "dying declaration", presence of a representative of NGO should be a condition.
3. 'Suraksha Samiti' for the protection of women.
4. In the case of rape, it should be the responsibility of the accused person to fight the case. Instead of 'Women Police Station' recruiting one women inspector on all the police stations of urban and rural areas, is a better option.

## **Other Suggestions**

Net work of NGOs at district and state level.

Establishment of women cell at district level. The cell must be assigned responsibilities to co-ordinate the work of all related agencies.

Certain religious practices are socially unfavourable to women. These should be openly discussed and banned.

Survey should be done of local availability of materials and market potential of products and women entrepreneurs must be informed of the results.



## 10. WOMEN AND EMPOWERMENT

Manubhai Vinodi\*

### Problems and Recommendation:

1. Unsatisfactory access and readiness to acquire education due to several socio economic and cultural factors.

Though girls/women's education is free in Gujarat, there is a need to reduce drop out rate.

2. Limited participation of women in the labour market.

Education should be more need based rather than information oriented.

3. Socio-economic and legal injustice

Enhancement of intra house hold decision making powers of women especially through training programmes for men.

4. Too much of governmental interference in functioning and provision of social welfare activities.

Enforcement of socio legal measures so that injustice is reduced.

### Action Plan:

#### Short term (2-3 years)

- (i) Review of the existing schemes related to social welfare Board of government and NGO's to be properly defined.
- (ii) (a) Laws to be enacted to involve women in the decision making process. (b) Laws related to women to be drafted by women.

#### Medium term (5 years)

Gradual withdrawal of government from the schemes for women. Government's role should be only of providing finance to NGOs and of supervision.

#### Long term (10 years)

No direct participation of government, except for making and enforcing the laws related to women.

Arti Nanavati\*

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\* Trustee and Joint Secretary, Muni Sewa Ashram, Baroda.

\*\* Reader in Economics, Department of Economics, M.S. University, Baroda.

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**Interview : 10.2**

**Manubhai Patel\***

**Problems**

1. Lack of awareness
2. High illiteracy rate
3. Socio Economic injustice.

**Recommendations**

Political empowerment - need to reserve seats both at the central and at state government level. To begin with 1/3rd of the seats.

Reservation in government jobs, Jobs such as that of primary teachers and nurses to be reserved only for women.

Drop out rate should be reduced. Need to generate awareness especially in rural areas regarding girls education.

Training programmes both for men and women.

**Action Plan:**

**Short term (2-3 years)**

- (i) Bill to be passed regarding reservation of seats for women both at the central and state government level.
- (ii) Review of property and inheritance laws.
- (iii) International character of demand for women should be studied and appropriate measures based on it should be taken.

**Medium term (5 years)**

- (i) Withdrawal of government from directly providing welfare schemes. Government should only monitor the functioning of NGOs.

**Long term (10 years)**

- (i) Review of the laws and their implementation. Complete withdrawal from undertaking schemes for empowering women.

**Arti Nanavati\*\***

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\* Ex-Member of Parliament, Chairman - Bhartiya Sewa Samaj, Chairman - Lal Bahadur Shastri Vidyalya

\*\* Reader in Economics, Dept. of Economics, M.S. University, Baroda.

**Interview : 10.3**

**Jyotsanaben Shah \***

**Problems:**

1. Lack of awareness due to low level of literacy among women.
2. Lack of gender sensitization especially among men.
3. Poor implementation of laws related to women.
4. No review of existing major schemes.

**Recommendations:**

1. Special training programmes through NGOs to create awareness among women.
2. Training programme for men working in government and non-government offices, covering various aspects of women empowerment.
3. Various income generating and skills formation schemes especially for the women in the age group of 35 - 40.
4. Most of the government run schemes through Social Welfare Department to be transferred to NGOs as 89% of the expenditure is incurred by government in paying salaries to the staff.
5. Need to have one apex body, as there are various overlapping schemes under different departments.
6. Proper use of media, T.V., News papers.

**Action Plan :**

**Short term (2-3 years)**

- (i) Political empowerment in terms of reservation of seats in government.
- (ii) Review of the existing schemes of government.
- (iii) Preparation of minimum common syllabus to impart training to officials and workers working at grass root level.
- (iv) Training programme should be designed in consultation with specialists in the field rather than through bureaucratic procedure.
- (v) For effective implementation of various welfare schemes, beneficiaries' contribution at least to the extent of ten per cent.

**Medium Term (5 years)**

- (i) During the training programme, stipend should be given to the women trainees.
- (ii) Creation of one apex body under which all the welfare schemes are implemented.
- (iii) Reservation of jobs for women in government offices to the extent of 33% as proposed for parliament and state legislation assembly.
- (iv) A part of husband's provident fund to be directly deposited in the account of his wife.

**Long term (10 years)**

- (i) Government should withdraw from directly providing welfare schemes as there are various leakages at the level of implementation. Government's role should be confined to only a few schemes which are common throughout the state.
- (ii) Government should finance and monitor the functioning of NGOs rather than providing the services because various schemes of empowerment of women have failed to deliver the goods because of poor implementation and lack of foresight on the part of the government.

**Arti Nanavati\*\***

\* Member - Planning Commission, 1991-92 Managing Trustee, Vikas Jyot

\*\* Reader in Economics, Dept. of Economics, M.S. University, Baroda.

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**Interview :10.4**

**H.C. Dholakia\***

**Problems:**

1. Lack of adequate social economic political and legal rights of women and their awareness.

**Recommendations:**

1. Promoting legal awareness and law enforcement.
2. Need to remove gender bias in the existing laws.
3. Standing arrangement to continuously monitor the functioning of the administrative system to eliminate the causes of gender injustice in consultation with the NGOs.
4. Professional, institutional and financial support to the women candidates.
5. Need for more working women's hostels.
6. Appointment of women in responsible positions so that gender bias at different levels is removed.
7. For gender sensitization among men, there should be special training programmes.
8. Negligence on the part of officials should be severely dealt with.

**Action Plan**

**Short term (2-3 years)**

- (i) 81st Amendment of constitution for reserving 1/3 of seats in Parliament and State Legislation Assemblies.
- (ii) Review of the existing various laws and their assessment from women's angle.
- (iii) Setting up of standing Law Commission to reform, monitor laws in various fields.

**Medium and Long term (5 years)**

- (i) Continuous monitoring of formulation of laws and their implementation.

**Arti Nanavati\*\***

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\* Ex-Dean, Faculty of Law, M.S. University of Baroda. Former Member, Law Commission of India. Chairman, Centre for Social Justice, Baroda.

\*\* Reader in Economics, Dept. of Economics, M.S. University, Baroda.

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**Interview : 10.5**

**Varsha Anjaria\***

**Problems:**

1. Lack of awareness among women
2. Lack of integrated approach to women's empowerment.
3. Limited NGO network
4. Missing spirit of social work especially among government officials.

**Recommendations:**

1. Focus on girl child, emphasis on education, access to modes of transport and means of communication.
2. Training for NGO personnel and government officials.
3. Need to strengthen intermediary agencies. Need to increase the number of trainers.
4. Need to raise pay scales of social workers especially those who are working in Aanganwadis.
5. Need to educate men so that empowerment begins at home through encouraging participation of women in decision making process.
6. Awareness programmes especially political, legal at the grass root level.
7. Programme to train women regarding the maintenance of documents and use of services provided by governmental and non-governmental agencies.

**Action Plan:**

**Short-term (2-3 years)**

1. Awareness programmes covering especially political and legal rights, for women.
2. Formulation of schemes which make women independent regarding means of transport and communication.
3. Revision of pay scale and other benefits to social workers specially those who are working in rural areas.

**Medium term (5 years)**

1. Employment generating schemes from the point of view of developing entrepreneurial skill.
2. Withdrawal from directly providing various service. More funding to NGOs working for women.

**Long per (10 years)**

1. Government's role should be more as a regulator and supervisor of various women empowerment schemes.
2. Government should monitor the functioning of NGOs and other agencies to have an integrated approach to women development.

**Arti Nanavati\*\***

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\* Professor, Faculty of Social Work, M.S. University, Baroda

\*\* Reader in Economics, Dept. of Economics, M.S. University, Baroda..

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**Interview :10.6**

**Rasilaben Gohil\***

**Objectives**

- Equality of status between men and women
- Development of self-employment opportunities.
- Woman education and health care.

**Background**

- No change in existing system.

**Problems**

- Social problems of working women
- Non-availability of women organisations in rural areas.

**Recommendations**

- Facilities for working women like baby sitters etc.
- Education and awareness programmes for women
- Free legal aid to women
- NGOs should be supported.

**Action plan**

**Short term (2-3 years)**

- Need based planning for women.
- Women education for empowerment and raising awareness.

**Medium term (5 years):**

- Adult education programme in rural area
- Change in social customs.

**Long term (10 years) :**

- No reservation system for women in jobs.

**Resources Needed :**

- Activities of Mahila Nigam need to be expanded. Mobilisation of resources from global level for women's awareness programmes.

**Issues:**

1. Are you in favour of reservation for women in political system? Why?
2. What will happen if uneducated women will become office- bearers ?
3. In women organisation, is it true that women in power will be more effective than other leaders or organisation for women?

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\* Sub-Treasury Officer, Treasury Office, Rajkot.

4. Is it necessary to provide free legal aid to women affected by social problems ?  
Why ?
5. How women leaders can be useful in the planning process of IXth five-year plan ?

**Recommendations:**

1. No reservation system is desirable as the level of education is low. Power to uneducated women will be meaningless.
2. Women members of organisations should be educated and at least one advocate lady is required in the executive to protect the organisation.
3. In each women organization, there should be a legal cell where free legal aid is available to needy women. For this women advocates should provide free services. The courts and male advocates are not in favour of women as they hesitate to reply odd questions pertaining to rape and other cases.
4. Successful women leaders can help in preparing realistic plans with awareness of local problems.

**B. M. Jani\***

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\* Reader in Economics, Saurashtra University, Rajkot-5.

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**Interview : 10.7**

**Jyotiben Gandhi\***

**Objective**

Achieving gender equality in all spheres of Life.

**Background**

Women have secondary status in the society. They lack literacy and training. Their role is affected by social values.

**Problems**

Women do not have role in decision making.

Employment opportunities are very less.

**Recommendations**

Equal opportunities in education, property rights, political participation.

Need for special training programmes.

Mahila Entrepreneurship scheme should be broad based.

Co-ordination of agencies for bankable loan at the district level.

**(1) Literacy rate is poor**

(a) effective Minimum Needs Programmes for poor families.

(b) Ratrishala

(c) Mass movement.

**(2) Legal rights are not known**

(a) Organisation of Seminars and workshops for women, (b) Information through media, (c) Effective role of educational institutions.

**(3) Political leadership**

Women should be made aware of political system, proceedings and functioning of local bodies.

**Nila Oza\*\***

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\* Hon. Secretary, Angan Vatika Bhagini Mandal, Bhavnagar.

\*\* Professor and Head, Department of Economics, Bhavnagar University, Bhavnagar.



**Interview :10.8**

**Mitabehen Brahmakumari\***

**Objectives**

To frame policies and programmes for welfare, development and empowerment of women throughout the state.

To ensure "Survival, protection and development of children with a special focus on the girl child and adolescent girls.

To adopt state level policy empowering women.

**Problems**

Women and girls are neglected absolutely - more so in rural areas.

Absolute injustice done to women and girls, no dignity, self-respect and economic self-reliance is given.

Policies and programmes inadequate with marginal impact.

**Recommendations**

Initiating awareness movement for gender equality.

Implement present programmes and devise new programmes, ensure their active political participation at all levels.

Give topmost priority to women's development programme and achieve gender balance in decision making at all levels.

**Action Plan**

**Short term (2-3 years)**

Implement present programmes fully and seriously, enhance people's participation in awareness building.

**Medium term (5 years)**

Frame schemes for 100% enrollment and retention of girls in schools.

**Long term (10 years)**

Decide target of 90% female literacy by 2011-12.

**Resources needed**

Give priority, allocate and raise more resources, approach international funding agencies for more resources.

**Tushar Harjivandas Chandarana\*\***

\* Brahmakumari Centre, Near GOPI cinema, Station Road, P.O. Amreli 365601  
Founder of "Brahmakumari" movement in Amreli district. Practicing spiritualism and conducting tours extensively for raising women's awareness.

\*\* Lecturer in Journalism.

**Interview : 10.9**

**Ushababen A Ruparell\***

**Objectives**

- To take sufficient care of girls and women.
- To uplift status of women every where in Gujarat
- To assure for their welfare, development and empowerment.

**Background**

Women's situation is quite unsatisfactory, 70-75% women girls suffer. Rural, uneducated, poor households girls and women suffer the most. Males to be educated about gender justice.

**Problems**

- 70-75% women yet without human dignity.
- Cover all women by comprehensive welfare programmes.
- Education, employment, income to be provided for empowerment.

**Recommendation**

- Arrange for 100% girls enrollment and 90% women's literacy.
- Increase number of welfare programmes.
- Train women for holding official positions for developing self confidence.

**Action plan**

**Short term (2-3 yrs)**

- (a) Spread literacy, and education. Provide employment & income to enable them to feel empowered.

**Medium term (5 years)**

District level women's movement needed, government department more effective.

**Long term (10 years)**

To bring all women fully in the "Mainstream" and their total emancipation needed.

**Resources Needed**

Will require fifty years. Global resources can be available for large scale women's education and employment programmes.

**Sangita Ghanshyambhai Tarpara\*\***

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\* Educated and women worker and social activist.

\*\* Lecturer in Economics.

Taralikben Acharya\*

**(A) Problems**

- (1) In the rural as well as in urban areas large number of girls of poor families and of the school going age i.e. after 6 to 7 year, do not go to the primary school. The parents do not pay proper attention and do not bother whether their daughters go to school or not. Therefore, girls who do not go to primary school or who remain illiterate, are unable to think about their development and empowerment.
- (2) There is no sense in making free and compulsory primary education as well as of free higher education for girls, unless the Government gives proper attention towards the implementation of free primary and higher education policies. Because, inspite of free and compulsory primary education, particularly in rural areas, a sizable number of girls of school going age do not go to school.
- (3) At many levels, implementation of the Government policies is not carried out properly. This is completely true so far as the implementation of the policies and the laws framed by the Government for women's development and empowerment.

**Action plan****Long term (10 years)**

Plan for Women's Development with particular emphasis on Primary Education.

**Resources Needed**

Government should provide financial resources to those voluntary institutions which are working for women's development.

"Before we think about Women's empowerment, we should first go into deep with regard to the problems that exist today in the way of women's development and empowerment. Women's empowerment is not possible without women's development. Therefore, it would be more appropriate if we first concentrate our mind on these problems".

**(B) Suggestions**

- (1) The Government must make serious and intensive efforts to explain the importance of primary education for girls in order to motivate the illiterate parents. Along with this, the Government should establish more and more Child Care Centres to look after the Children of working parents who work as agricultural labourers or engaged in any other full time economic activities, so that the girls of school going age would become free from the responsibility of looking after her younger brother or sister.
- (2) After establishing the Child Care Centre in each village, the Government must appoint a sincere person to whom duty of surprise check can be assigned for making sure that the girls of school going age go to school.

I.S. Desai\*\*

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\* She has been serving as a Secretary of the Bhagini Samaj, Valsad since 1971. She is the founder member of Urmi Mandal working in Atul. She was the active member of the Divya Jivan Sangh. She writes articles in 'Kumar' monthly publication in Gujarati. She is a daughter of Dr. Dolarrai Mankad.

\*\* Lecturer in Economics, Shah N.H. Commerce College, Tithal Road, Valsad.

Smt. Bakulaben A. Goswala\*

**(A) Problems**

- (1) The procedure of getting benefits of various schemes is so long and complex that many women are not able to take the full advantage of the schemes. The schemes are generally administered by male personnel or employees. This is not appropriate if we really want to empower women.
- (2) There is emotional blackmailing or exploitation of women. For example, when a woman demands her share in parental properties either land or house, her brothers threaten her.
- (3) Problems of women due to gender bias or sensitization are still going on and women have yet not achieved the requisite or the deserved acceptability in all walks of life.
- (4) There are certain religious dogmas customs and social laws which obstruct women in getting their empowerment.
- (5) Women are not so alert and conscious regarding their rights given by the Government through various laws and they do not know various laws framed by the government in order to protect them in unfavourable economic and social situations.
- (6) In our male dominating society, majority of men do not like or do not prefer to empower women. Because they do not want to loose their power that they exercise over women. Hence, she feels insecure and is not able to think independently as an individual.

**(B) Remedies or Solutions**

- (1) The government should take steps to make the procedure or network of the various schemes very smooth and simple so that benefits of various schemes working for women's development and empowerment can reach directly to them, otherwise intermediaries will take the advantages of the schemes.
- (2) The administrative power should be given to women to run various schemes and administrative training should be given to them so that they will be able to run various schemes associated with production and marketing of goods. Thereby exclusive importance of men can be reduced.
- (3) In order to prevent emotional blackmailing of women against social customs like dowry and property rights, laws giving rights and empowerment to women should be strictly and properly implemented by the the government. Whatever loopholes are there in the laws should be removed.
- (4) More and more programmes should be organised for creating general awareness in women regarding their social and economic status in the society. Various economic opportunities for generating income to support family income, for removing blind beliefs and encouraging political participation should be provided. The programme of creating general awareness among the women can be carried out by establishing

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\* Shivam Society, Halar Road, Valsad.  
Member and President of "Astitava" (A leading voluntary organisation working for women's issues and rights).

Mahila Mandals at village level and by encouraging establishment of voluntary organisations like “Astitava” and “Jyoti Samaj” (Working at Valsad and Navsari respectively) in urban areas. Organisation of Mahila Shibirs, Seminars, Symposia, Discussion

Forums, essay and elocution competitions, publication of journal or magazine regarding women's issues, rights and empowerment, related voluntary organisations. In order to support working of Mahila Mandals and voluntary organisations, there must be some Support structure.

- (5) In order to remove gender bias and to give a respectable position or status to women as well as to change discriminating attitudes of men, the government should introduce long - term projects.

**I.S. Desai\***

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\* Lecturer in Economics, Shah N.H. Commerce College, Tithal Road, Valsad.

Kalpna Shah\*

### Problems

Undervaluation of the work done by women.

Under reporting.

Women working in informal sector will have to face negative consequences of New Economic Policy.

### Recommendations

Equal pay for equal work.

Data Bank on women.

Training centres for women.

### Action plan

#### (i) Short term (2-3 yrs)

Creation of autonomous voluntary organisations.

#### (ii) Medium term (5 yrs)

Political participation at different levels.

Reservation of seats for women.

#### (iii) Long term (10 yrs)

Aim at 100% literacy; study of specific problems of women workers to be undertaken.

Role of women in economic development is now well recognised by planners but the benefits of development are yet to percolate to them. For this, education alone cannot solve this issue though it is an important factor. The main factor instrumental in empowerment is political participation. The role of women in Panchayat Raj institution is a step in this direction. The political power alone can change the outlook. Of course economic independence is necessary.

Women are still not mature enough to enjoy their rights. More so, the women in rural areas. Urban women have better awareness. There is no proper valuation of work done by the womenfolk both in urban and rural areas. If this is undertaken, the status of women in society will enhance. There is large degree of undervaluation of work. Another problem is that of under-reporting and this greatly affects the status of women.

The government must take up the task of setting up Data Bank for women. For regions, cell to monitor the activities of women can help them in making the approach scientific. Reservation of jobs, seats in political machinery etc. can be temporary measures to bring women in the mainstream. But any measure taken should be taken not in isolation but as a part of the movement.

Subadra Ragothaman\*\*

\* Dr. Shah is Reader, Dept. of Rural Studies, South Gujarat University, Surat. Her specialisation - women studies. Acting Vice Chancellor of South Gujarat University. She has written 4 books - 3 Monographs & several articles - one is on Women, Empowerment & Political participation.

\*\* Lecturer in Economics, Dept. of Economics, South Gujarat University, Surat.

**Interview 10.13**

**Saroj Verma\***

**Problem & Recommendations**

**Entrusting Power**

Give Statutory & Constitutional roles in public horizons like panchayats & municipalities. They should particularly be entrusted to look after 29 subjects included in schedule XI of the 73rd amendment in the Indian Constitution. These subjects relate to environment, maintenance, water, health etc. Women should be trained and paid for carrying out these functions. This would create a sense of respect in the society and increase self esteem about their governance and a meaningful role in development activities. Creating skill and applying it is more important than just giving power.

**Awareness of social evils like male child preference**

Along with women, men also should be sensitised in realising responsibilities and work together for a social change. Increase public awareness of the value of girl child.

**Gender Equality -Difficulties in implementation of gender policy**

Dominant male fundamentalist forces realise principal prerequisite of legitimate authority to change the historically played role of women.

**Illiteracy and lack of information**

NGOs working in gender perspective should reach upto the grassroot level with their network development programmes, provide full information on government policies and inspire the rural illiterate for self-reflection and open communication.

**Accountability**

Are Women Civil servants, politicians and development agents effective representatives of women's interests?

**Short Term Training**

A minimum 15 days to 1 month training should be imparted to all elected women representatives in municipalities and panchayats to familiarise the administrative procedures and handling of other activities.

**T.R. Sukumari Murty\*\***

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\* (GSCPT) Visiting Professor, Gujarat Vidyapith, Research in the field of political science, environment and public activities around the issues of development.

\*\* Research Officer, Sardar Patel Institute of Economic and Social Research.

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**Interview 10.13**

**Balaben Trivedi\***

**Recommendations**

- 1 Such information should be communicated to women that enable them and lead to empowerment. Information would widen women's horizon.
- 2 Women should be motivated for non-traditional, modern, more productive self-employment.
- 3 Technical and non-traditional education should be encouraged amongst women.
- 4 Women should be encouraged to participate in co-operative management.
- 5 Women should be equipped with interpersonal as well as mass communication skills.
- 6 Need for gender sensitization in order to understand women's issues from gender point of view and for removal of hurdles. Society, particularly male, should be sensitized for women's empowerment.

**Women Empowerment**

There is a need for:

- 1 gender sensitization
- 2 vocational guidance
- 3 educational guidance
- 4 entrepreneurship development
- 5 media exposure
- 6 information input.
- 7 learning co-operative management.
8. psychological counseling.
9. accommodating women at decision making level.
10. eliminate all discriminations against women.

**Rekha Kotak\*\***

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\* Dr. Trivedi is a Social Researcher (ISRO).

\*\* Sardar Patel Institute of Economic and Social Research, Ahmedabad.



### Problem & Recommendations

1. Entrusting Power

Give Statutory & Constitutional roles in public horizons like panchayats & municipalities. They should particularly be entrusted to look after 29 subjects included in schedule XI of the 73rd amendment in the Indian Constitution. These subjects relate to environment, maintenance, water, health etc. Women should be trained and paid for carrying out these functions. This would create a sense of respect in the society and increase self esteem about their governance and a meaningful role in development activities. Creating skill and applying it is more important than just giving power.

2. Awareness of social evils like male child preference

Along with women, men also should be sensitised in realising responsibilities and work together for a social change. Increase public awareness of the value of girl child.

3. Gender Equality -Difficulties in implementation of gender policy

Dominant male fundamentalist forces realise principal prerequisite of legitimate authority to change the historically played role of women.

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NGOs working in gender perspective should reach upto the grassroot level with their network development programmes, provide full information on government policies and inspire the rural illiterate for self-reflection and open communication.

5. Accountability

Are Women Civil servants, politicians and development agents effective representatives of women's interests?

6. Short Term Training

A minimum 15 days to 1 month training should be imparted to all elected women representatives in municipalities and panchayats to familiarise the administrative procedures and handling of other activities.

T.R. Sukumari Murty\*\*

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\* Director, Gujarat State Crime Prevention Trust

\*\* Research Officer, Sardar Patel Institute of Economic & Social Research

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**Interview 10.15**

**Ushaben Sheth\***

**Problems**

- 1 Lack of awareness about various government/voluntary schemes among women.
- 2 Nutrition and health problems among female child/women.
- 3 Effectiveness of various female programmes.
- 4 Effective female leadership.
- 5 Crimes against women.
- 6 Gender Inequality

**Recommendations**

- 1 Media like T.V. and Sheri Natak' should be used for effective implementation of women and for their effective leadership.
- 2 Awareness programme about existing health benefit schemes (ICDS).
- 3 Coordination among various programmes implemented by the N.G.Os
- 4 Effective training for leadership should be introduced by N.C.C., N.S.S. and Scout, etc.
- 5 Eliminate loopholes in the laws and their implementation

**R.R. Bhatnagar\*\***  
**Swati Dave\*\***

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\* Head, Monetary Cell, Polytechnic Campus.

\*\* Sardar Patel Institute of Economic & Social Research, Ahmedabad

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**Interview 10.16**

**Kanjibala Trivedi\***

**Problems**

- 1 Lack of effective leadership
- 2 Office management among females.

**Recommendations**

- 1 Leadership within family by strengthening their economic earning capacity and education at least upto XII standard.
- 2 Work assignment should be important rather than fixed hours of work for female workers
- 3 Family education (social education should be considered as one of the subjects in the school.)
- 4
  1. There should be at least 12th standard education among females.
  2. Small family and work efficiency have negative relationship; working woman living in joint family has less problems.

**Swati Dave\*\***  
**R.R. Bhatnagar\*\***

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\* Rtd. Chairperson of Jyotisangh.

\*\* Sardar Patel Institute of Economic & Social Research

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**Interview 10.17**

**Sumitraben Thakor\***

**Problems**

1. Need education for effective leadership.
2. Need motivation for small family.
3. Which women effects on office work ?
4. Raising status for women.
5. Equal property status.
6. Crimes against women

**Recommendations**

1. Training class and workshops should be organised for leadership
2. To raise their educational and economic level, it is necessary to support household industry programmes.
4.
  1. To develop the leadership quality among women. To develop the strength among themselves to fight for their rights.
  2. To provide small workshop training to male community where classes should be taken by the female community.

**Swati Dave \*\***  
**R.R. Bhatnagar\*\***

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\* *Vikas Grah, Ahmedabad.*

\*\* *Sardar Patel Institute of Economic & Social Research, Ahmedabad.*

## GROUP 11: CULTURE AND HERITAGE

### Experts:

Mr. Tushar Bhatt  
Mr. Katikeya Sarabhai  
Mr. Chandrakant Baxi

### Resource Persons:

Ms. S K Sekhon  
Mr. Sanjay Gupta

### OBJECTIVES

- bring to the foreground the cultural identity of the people of Gujarat
- inculcate a sense of aesthetics and sustain pride in the heritage of Gujarat
- support as living traditions the rich cultural heritage of Gujarat.

### BACKGROUND

- Culture and Heritage are the basic identity of people and an index of their development. It is therefore erroneous to perceive them as being superfluous to development. Gujaratis have been wrongly typecast only as traders and business people. They do excel in trade and industry, but that is not all they excel in. Gujarat has a very rich cultural heritage which identifies its people. The conservation of this heritage is essential to reaffirm the identity of a Gujarati and that of Gujarat.
- Art and Culture are looked at as forms of entertainment and not as a living tradition worth conservation. Conservation of art and culture calls for a vision, a strategy as also a continuing plan of action and investment in a time frame. with an involvement of the government, public figures, experts, civic local bodies and the people at large.
- With rapid industrialization, coming up of gigantic projects, technology, globalisation, interaction between people of the world, a cultural imprint of Gujaratis is vital to Gujarat.

### **PROBLEM**

Art and Culture viewed as form of entertainment and not conservation

No involvement and participation of people/local bodies

### **RECOMMENDATIONS**

- Framing of a policy to focus on Art and Culture as a living tradition to be conserved
- Conservation through a strategy of systematic identification, documentation, training and development.
- Celebrate heritage sites with the local participation
- Involve local bodies, NGOs, industrial houses in conservation of monuments and heritage sites.

Inadequate legal framework for control mechanism  
Paucity of skilled human resource

- Restructure existing laws and enact new ones where needed.
- Train existing human resources.
- Introduce job-specific curriculae in existing institutions for broad basing the training facilities
- Increase budgetary outlays.
- Create State Cultural Endowment  
Inappropriate grouping of subjects concerning culture and heritage
- Regrouping of various subjects concerning culture and heritage under one umbrella.
- Set up an apex institution (Sanskriti Kunj Foundation.)

Inadequate financial outlays

No forum for coordination of the activities of various organisations

Art and culture not viewed as worth conserving

Find and conserve places, areas, people, performing arts and artists.

No systematic involvement and participation in process by beneficiaries and public

A continuing plan of action for involving on an ongoing basis the Govt. public figures, experts, local bodies and the people at large.

There is no suitable legal framework (for development control mechanism).

Restructure within one year laws relating to archaeological monuments, to serve the need for conserving settlements, habitats, public buildings, archaeological monuments, conservation of heritage zones. Enact law on Public libraries.

Documentation necessary

Identify institutions/individuals and assign them work on documentation.

### **ACTION PLAN:**

#### **(i) SHORT TERM (0-2 YEARS):**

- Frame policy guidelines for involvement of local bodies, NGOs, industrial houses in the conservation of heritage.
- Regroup and bring under one umbrella subjects like Public Libraries, Archives, Museums, Archaeology, Monuments and Memorials, Literature, Performing and Visual Arts and their academies, Celebration of Heritage Sites, Anniversaries and Centenaries.

- Establish an apex institution (Sansriti Kunj Foundation)
- Set up the State Cultural Endowment
- Identify:
  - Visual, Performing Arts and Crafts for Documentation.
  - Institutions / individuals for carrying out documentation.
  - the training needs of the human resource presently manning the cultural institutions / organizations and the institutes for training them.
  - settlements, habitats, public buildings, archaeological monuments and heritage sites for conservation

**(ii) MEDIUM TERM (5 YEARS)**

- Commence documentation through identified institutions / individuals with specific time frame.
- Train human resources already manning the cultural institutions and organizations

**(iii) LONG TERM (10 YEARS)**

- Set up Museums of Lifestyle, Hall of Fame, Maritime Museum, Science Museums, Folk Art & Craft Museum, and Museum of Textiles, etc.

## XI. CULTURE AND HERITAGE IN PLANNING

R.C. Popat\*\*

Culture and heritage are not merely limited to ancient monuments. This also includes the traditions, the habits and customs which are to be preserved in their original forms for the future generations.

We have very rich heritage of our culture, but the tornado of Westernisation and other constraints are becoming hurdles in the preservation of this heritage.

Gujaratis are known as efficient business community and not as the people concerned with the preservation of customs and culture. If we develop tourism centres in Gujarat, these can also be cultural resorts where people would learn about our culture.

Information plays an important role in conservation of our cultural heritage. Following suggestions deserve attention.

1. Inclusion of the information about our culture and heritage in school curriculum.
2. Information can also be imparted through some extra curricular activities.
3. Some good reference books can be prepared for the use of young generation which can provide authentic information. Such books should be prepared districtwise since each district has its own culture and traditions.
4. Various types of competitions at school/college and university level can be arranged focusing on the core element of cultural heritage of Gujarat.

There is a need for sharing information about the cultural heritage with the next generation.

Some centres should be developed in various parts of the state and even in some other states which could display the full view of Gujarat culture and reflect fully its cultural identity in true perspective.

We can develop resort-cum-heritage centres where glimpses of Gujarati culture can be shown through the audio-visual shows, puppet show,s etc.

There should be some model villages of Gujarat where a visitor can find and have feel of village life. Such model villages should focus on various facets of Gujarati culture, e.g. Gujarat rural customs, traditional transportation like cart, bullock and horses, traditional food and aspects of life style.

There are variations in culture across Kathiawar, Kutch and North-South Gujarat and even Saurashtra Region in Sorath, Halar, and Gohilwar areas. The model centres at each place can help the tourism development and also act as cultural links

There is a need for development of art centres and a good auditorium, at least one, in each district by the government.

Cultural academies should be established and developed in each district. Vacation camps and seminars should be organised.

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\* Report of the District Level Meeting held on 20-4-1997 at Jamnagar

List of the participants is given in Appendix-I

\*\* Economic Department, South Gujarat University, Surat.



NGOs should be involved in all the activities relating to preservation of cultural heritage of Gujarat.

Steps should be taken for the preservation of the folk art of Gujarat viz. Garba, Raas, Dandiya Raas, Bhavai, Ramleela, Dhadhi Leela, etc. in their original traditional forms.

### **SUMMARY**

1. To establish the Gujarat Cultural Centres at the various parts, inside and outside Gujarat which can provide a full glimpse of Gujarat culture.
2. Audio-Video cassettes of our folk art, folk literature, Bhajans, Lok Kathas etc., presented to the masters of each discipline should be prepared and be distributed to schools, colleges and other cultural centres at subsidised rates.
3. Research Centre for our folk art should be started.
4. Literature about culture and heritage should be developed in form of districtwise reference books and story books.
5. History of sculptures, monuments and temples should be documented and preserved.
6. Tourism industry should be developed with greater emphasis on cultural aspects.
7. Involvement of NGOs and direct participation of the people should be initiated and encouraged.
8. "Gujarat Gram" with all the feature of our culture of rural Gujarat should be developed at district level.

## 11. CULTURE AND HERITAGE

Kalhansbhai Patel\*

### Objectives

An overall assessment of problems, prospects and progress, challenge pertaining to our varied culture and rich heritage.

Achieving cultural integration harmony and maintaining our invaluable heritage and exposing our culture and heritage to a global audience dreaming of "Greater India"

To ensure positive attitude of government and its continuous appropriate patronage and provision of flow of resources to relevant institutions, activities and related pursuits.

### Background

It is the state which manifests the elements of diversity in unity and unity in diversity and still carries and exhibits a commonalty element which is so real. Gujarat is a cultural centre having prominent urban cultural centres like Ahmedabad, Vadodara, Bhavnagar as well as rural mofussil centres like Chorward, Mandavi etc. Interestingly, this is, further, peripheries by the Tribal belt including Dang, Ahwa, Valsad, Rajpipla, Pavijetpur, Chhota-Udepur, Panchmahal and Shamlay. Needless to say, the state had remained and continues to remain the patron of fine arts, performing arts and literature and related activities since independence. However, its fullest potential is yet to be realised and many more lacanue, deficiencies across different activities need to be identified, rectified and tackled involving some immediate remedies and long-term solution.

### Problems

Autonomy given is only on paper. No genuine freedom to the members of respective art and culture bodies. A greater problem of concern is the composition and constitution of such bodies. Non-deserving individuals often occupy such coveted positions culminating into ineffective and inactive functioning.

There is a need to increase the interaction and awareness between rural, tribal and urban areas to ensure cultural identity and emotional integration. This process has to be accomplished amidst urbanization, industrialization and modernization.

There is a necessity of a professional approach to Tourism. We have also to preserve and enrich our cultural identity along with concept of universality.

### Action Plan

The most deserving and outstanding individuals must be appointed and the selection process now must ensure that the membership of an art and cultural academy consists of new young talents and old stalwarts. Inadequate norms of government be discontinued and to ensure effective functioning a partial periodical review of members as well as that of the entire body be made to assess their objective contributions.

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\* Professor of Indian History Art & Archaeology, Department of Archaeology, M.S. University of Baroda. Leading exponent of Gujarat Garba, Rass & Folk Music. Nominated member of West Zone Cultural Centre by Governor of Gujarat for 1996-99.

The School Children, College University students and youth in general must be mobilised periodically and they be encouraged to participate in cultural activities, to explore new horizons and dimensions and their talents be utilised fruitfully as a bridge between rural and urban art.

Our art and culture must get maximum exposure with the emotional attachment. Rural life, values, technology, arts and crafts are not antithetical to globalisation and modernisation.

Ethnic Fashion show on a large scale involving diverse folk music, folk dance, folk customs, jewellery etc. be organised inviting popular participation and for its appropriate exposure. All instruments of media be used to project cultural identity. Professional approach to tourism would involve (1) maximum utilisation of its potential by appropriate marketing methods and tapping new tourist spots, (2) Adequate growth of coastal, hilly and forest regions, each offering a culturally and environmentally different attraction to the tourists, (3) Related activities being the source of tourist attraction be given due attention and they must be developed like fishing, boating, sea beach, coastal sports, mountaineering and tracking activities, (4) Site museums, open hut arts and crafts fairs, cash and carry shops, traditional food item centres etc. should be so developed as to popularise the tourist spots, (5) Adequate transport facilities must be ensured and well arranged side tours be devised minimising tourists' problem. Archaeological - ethnic (folk) art museums and art galleries be kept on major tourist sites.

**Sanjiv M. Joshi\***

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\* *Reader in Economics, Department of Economics, M.S. University, Baroda.*

### Problems

Absence of real autonomy to the members of Lalita Kala Academy, Academy of Music, Dance and Drama and Sahitya Academy. There is no scope for independent decision making even when it is right. There is considerable discretionary interference of the government. Implementation of any genuine proposal presupposes and requires political and bureaucratic endorsement. The honorary members are relegated to second fiddle.

There is paucity of adequate resources and infrastructure facilities. Owing to higher administrative expenses, limited funds remain available for development of art and culture. Lack of adequate finance is the major handicap.

There is no clarity regarding aim of Tourism; what is the aim of Tourism? Is it only commercial? If yes, then, are we prepared for the tourism growth of Thailand type? Is it not true and appropriate that our tourism growth must be culturally viable besides being profit earning and revenue generating?

### Action Plan and Resources

In order to minimise subjectivity and entrance objectivity, the selection and appointment process needs to be more transparent. Greater decentralisation in decision making among the different bodies is required. One way of accomplishing is rotation of members of different academics. The government representation should be minimal. The decision to plan and execute must rest with respective bodies.

In order to ensure real and financial autonomy, proper corpus of funds (approx. Rs.1 crores). Proper Grant (recurring) availability of a building and infrastructure facilities are an imperative need.

Government may, as a part of the long run development policy, resort to appropriate legislative measures which allow and enable private individual, industrialist the tax exemptions, tax credit and tax holidays, if they make available and provide sufficient funds to encourage and maintain our culture heritage.

Talented artists in different cultural activities must have access to some reasonable funds to bring out productions in their respective fields; production of documentaries must be encouraged to at least preserve our rich varied cultural heritage. Government may initiate an yearly programme of inviting entries from potential artists desirous of making productive contributions on some approved themes related to our culture.

A group of individuals or an institution may initiate efforts to prepare at least Encyclopedia of Culture and Heritage of Gujarat to document in an exhaustive way the information on individual contributions, institutions, historical places, form of different arts, etc.

The concepts of community theatre, street play etc. must be revived and should be properly encouraged.

Affordable holiday-homes must be established at major Tourist spots so that they are accessible to all and not only to the rich people.

Sanjiv M. Joshi\*\*

\* Ex-Head, Department of Dramatics Faculty of Performing Arts, Ex-Dean, Faculty of performing Arts, Ex-Chairman, Gujarat Academy of Music, Dance & Drama.

\*\* Reader in Economics, Economics Department, M.S. University.

### **Objectives**

- Protection of Archives
- Maintaining Monuments in Gujarat
- Management of maintaining libraries of folk literature and documents.

### **Background**

People's participation in maintenance of Monuments and Protection of Arts.

### **Problems**

- Lack of financial resources for maintaining and protecting art and artists.
- Rigid Constitution is coming in the way.
- Identification of artists and folk singers.

### **Recommendations**

- Govt. should provide finance
- Change in the constitution
- Survey of folk artists.

### **Action Plan**

#### **(i) Short term (2-3 years)**

Maintenance of Historical temples and monument .

#### **(ii) Medium term (5 years)**

Decentralised planing to supervise rural and folk art.

#### **(iii) Long term (10 years)**

Publicity and publication of folk literature. Protection of artists and instrument players.

### **Issues**

1. What are the ways and means to protect culture and old heritage in Gujarat ?
2. How to manage museum and monuments in Gujarat ?
3. What are your original ideas to protect culture & civilization in Gujarat ?
4. Suggestions for IXth five year plan.

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\* Jt. Director of Information, Jubilee Garden, Rajkot-360 001

### **Recommendations**

1. Literature and hand-written scripts, should be taken-over by Record Offices and protected and should be available to the researchers, artists and other people. Efficient management of museum, pictures, protection to artist particularly old folk artist appear to be the proper way.
2. Sufficient fundings is required to museum and maintenance of monuments in Gujarat Art Gallery. It should be developed to protect Statues, sculptures and pictures of art. Reasonable entry fee is necessary for tourist and visitors.
3. To protect our culture and heritage we should protect folk artists, Bahurupi system, folk musicians, maintenance of temples and art of construction of old temple. Old princely states used to patronise such people. Every year Medal is given by the President of India to such type of Artist should be continued.

Since the time of Gujarati King Mulraj Solanky, artists were protected to construct Hindu temples, Jain temples and Mosques. Such type of arts and culture do not exist any where in other countries.

**B. M. Jani\***

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\* Reader, Department of Economics, Saurashtra University, Rajkot - 360 005

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**Interview : 11.4**

**Deepakbhai Mehta\***

**Kamleshbhai Avasthi\*\***

**Objectives**

1. Different regions of Gujarat have different cultural heritage. We must aim to preserve and protect these valuable heritage.
2. To create the taste in the new generation for works of art, embroidery, pottery and a number of home made products of these areas.
3. To preserve literary and musical heritage of the concerned region.

**Problems**

1. In the name of development Government and the society both have belittled the characteristic of regional art, dresses, entertainment media, food habit etc.
2. The modern media technology like Radio and TV are not used to protect and promote our cultural heritage. On the contrary they are misused to destruct all the cultural values.
3. Craze for westernisation has adversely affected our regional art and cottage industries.
4. Regional languages are not properly respected.
5. When old houses are demolished the valuable carving on the doors etc. are destroyed.
6. Local musical art is slowly being forgotten.

**Recommendation**

1. Awards are quite alright. Artists should be given employment by generating demand for their products.
2. To preserve literary heritage of the region, old books which are scattered in different public and private libraries should be collected or micro filmed and preserved.
3. Folk songs of different regions, caste and sub caste should be recorded.
4. Regional languages be respected by accepting them as correct language considering it as dialect. This must be accepted both as spoken and written.
5. People should be encouraged to use local products and take pride in the same.
6. The works of art and wood carving should be protected when old houses are demolished.
7. Interest in the local musical art should be revived by organising Dayaras etc. Competition programmes of such arts may be useful. It can be offered as optional subject at various levels.

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\* Former Principal, Shri Daxina Murti High School, Bhavnagar.

\*\* Famous Singer of Bhavnagar, (Voice of Mukesh fame).

### **Action Plan**

#### **Short term**

1. Identify the local masters in various arts etc. and provide them market umbrella.
2. Develop tourist spots so that such products are encouraged.

#### **Medium term**

1. Provide necessary infrastructure and marketing facilities.

#### **Long term**

Developing pride for our regional culture may ultimately be based on quality of leadership. They must adopt life style of our region and not western life style. People will follow the leaders. It is a question of changing the mindset.

**Bharati D. Dave\***

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\* Reader, Department of Economics, Bhavnagar University.



Interview : 11.5

Kalindibahen Vasantray Parikh\*

### Objectives

To preserve rich and varied culture and heritage of Gujarat to formulate programmes for their development.

To complete various programmes which were formulated.

To promote activities relating to culture and heritage in all schools, colleges, offices, everywhere.

### Background

Gujarat has rich and varied cultural heritage. Several programmes, schemes, institutions are operative but their impact is marginal. Vast majority of Gujarati speaking people residing in Gujarat are unaware of our culture and heritage.

### Problems

Programmes and schemes conceived in the plan remain unimplemented.

Apathy of general public towards culture and heritage.

Inadequate financial allocation.

### Recommendations

Allocate and release more resources and implement on priority basis.

Activate information and tourism departments and media to awaken and enthuse people.

### Action Plan

#### (i) Short term(2-3 years)

Compel relevant departments and pursue media for generation of interest among people at large.

#### (ii) Medium term (5 years)

Implement all programmes under the plan on war footing.

#### (iii) Long term (10 years)

Appoint permanent commission to make compulsory comprehensive recommendations. Ensure compulsory yet, enthusiastic observance, of National holidays in all institutions and offices of all types.

### Resources Needed

Raise resources from public, institutions and offices.

Sangita Ghanshyambhai Tarpara\*\*

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\* Social worker, writer, poetes and thinker.

\*\* Lecturer in Economics - Amreli

**Interview : 11.6**

**Dhanlaxmibhen T Detha\***

**Objectives**

- To preserve culture and heritage of Gujarat.
- To devise numerous programmes for the same.
- To awake, enthuse people and NGOs.

**Background**

Rich, varied culture and heritage can improve quality of life and can attract foreign tourists,

**Problems**

- To complete programmes under the plan.
- To set up a commission to advise government and society.
- To promote NGOs to enter to undertake this sector.

**Recommendations**

- Release funds for these programmes.
- Promptly set up special voluntary organizations. It can work wonders.

**Action Plan**

**(i) Short term (2-3 years)**

Complete unimplemented programmes. Release funds. Readable, interesting books to be prepared.

**(ii) Medium term(5 years)**

Set up a commission. Programme for all aspects with its help.

**(iii)Long term (10 years)**

Set up a district-level permanent 'Exhibition-cum-Museum' on culture and heritage of Gujarat.

**Resources Needed**

- Provide fund in 9th plan. Prepare other plans to raise/establish endowments.
- Encourage business organizations to enter in a big way.

**Sangita Ghanshyambhai Tarpara\*\***

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\* Social worker associated with several organizations. Retired principal of Girls' High School with proven performance and dedication.

\*\* Lecturer in Economics

### Action Plan

1. Main cultural activities like craftsmanship, folk dances and others are fast disappearing, despite efforts made by few scholars and artists. A work by Zaverchand Meghani in Saurashtra is a classic example. This type of work should be encouraged.
2. Public awareness should be encouraged to involve N.S.S. and other Non-Government Organizations.
3. Archaeological Survey of India should protect monuments more than 100 years old.
4. Voluntary organisation should be encouraged. Government should come forward.
5. Library - on wheel should be encouraged.
6. Villages having more than 1000 population and having archaeological heritage should get sufficient government fund to protect the same.
7. Electronic instruments and government machineries can be exploited to create awareness among people and enable them to look after their heritage in proper perspective. People government interaction is welcome.

Ajay B. Nalk\*\*

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\* J.P.P. Arts & Commerce College, Killapardi, Head, Department of History, M.Phil, Ph.D guide.

\*\* Lecturer, Rofel College, Vapi, Block a.13, P.O. Amreli - 365601

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**Interview : 11.8**

**Jashubhai Naik\***

**Action Plan**

1. Facility of art gallery should be available.
2. Financial aid should be provided to local artist to protect cultural heritage.
3. Emphasis should be laid on drawing at pre-primary, primary and secondary level.
4. Proper admission procedure to be adopted for fine art by technical persons.
5. Archaeological Survey of India should initiate exploration of historical site of the district.
6. Stress should be laid on library facility at all district level Government should allot ad hoc grant for this to different educational institution to run a full-fledged library.
7. Due attention to be paid for proper maintenance of historical as well as beautiful picnic points. Cleanliness should be given priority.
8. There should be a public awareness programme.

**Ajay B. Naik\*\***

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\* Retd. Principal, Kalamahavidyala.

\*\* Lecturer, Rofel College, Vapi, Block o.13, P.O. Amreli - 365601.

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**Interview : 11.9**

**Jyoti Vaidya\***

**Pallavi Vyas\*\***

1. Usually this is a neglected aspect of planning but it is still important, especially in view of increasing use of the Human Development as a measure of overall well-being of people.
2. Looking at the importance of education as an important social input, libraries should be allocated more funds.
3. It seems from the Eighth Five Year Plan document that only Rs.60 crores have been allocated to the development of Archives. This amount should be increased.
4. Sangeet Nritya Natya Academic should be autonomous in the true sense without any state government interference.
5. The Sangeet Nritya Natya Academy should be allotted more funds so that the cultural activities in the state can get a boost.
6. The government should provide financial assistance to authors who publish their original work in various forms of literature.

**M.B. Dave\*\*\***

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\* A retired college lecturer, a dramatist.

\*\* Retired as a School teacher. She is President of Mathar group associated with cultural activities. Residing at

\*\*\* Reader, Department of Economics, South Gujarat University, Surat.

**Interview 11.10**

**Khodidas Parmar\***

**Objectives**

To resurrect the arts of family occupation and enhance their pride. To develop up arts of the rural people.

To sustain the human values which are being vanished due to economic changes.

To stop the academies being monopolist of arts;

To protect the ancient memorials of local people To stop the demonstration of sexual vulgarity, noise pollution, violence etc. done in the name of art and entertainment in films.

**Background**

Various types of arts were associated with the work of small artisans ceased to express. This has now disappeared with commercialisation.

The government has formed various academies for various arts; they have been made independent. But dirty politics has spoiled the whole atmosphere, voting rights are given to the members, rich people easily can be member by paying membership fees; the real artist is kept away.

**Problems & Recommendations**

1. Folk-arts are being forgotten by the village artisans.

The government should encourage to increase the demand for folk artistic pieces; educated people should also help; rural arts should be taught in village schools.

2. Joint families converted in divided families and economic relations take the place of human relationship.

The advantages of joint family and values of human relationship should be expressed in films and drama.

3. Arts academies have become the means of vested interest.

The voting rights to elect the office bearers of the art academics should be given according to eligibility.

4. Rural artistic things are being sold and exported by exploiting the artisans.

The government should intervene to ensure reasonable prices to rural artists.

5. Village memorials are vanishing and their historical stories and social values are being forgotten.

The village leaders should take responsibility to protect the memorials, stories, songs and the social values. The monuments can be remembered by works of artists at village level.

6. The films have violence, noise, pollution and sexual distortions.

Good films should be encouraged by tax-relief, financial help etc. and the bad films should be penalized by higher taxes and strict censorship.

Radio and television should emphasise good social values.

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\* Lecturer in Folklore in 'Shamaldas Arts College, Bhavnagar (1970 to 1990); At present Ph.D guide in Folklore.

## **Action Plan**

### **Short Term (0-2 years)**

To search out the vanishing rural arts like embroidery, knitting, sketching, carving etc. and to prepare a scheme to develop them.

To arrange exhibitions and prize competitions of rural artistic pieces.

To review the objectives and structure of art-academies.

### **Medium Term (5 years)**

To open shops for selling rural artistic items. To provide financial credit to shopkeepers and artisan and subsidy to the consumers.

To establish a rural art centre at every district place. To sustain continuous production.

To search out knowledgeable persons and make a list of them; to invite them to be members of art-academy.

### **Long Term (10 years)**

To establish an art gallery at every district place; to assign the management of it to a committee of experts of various arts. To assist it financially by the government.

**Ghanshyam Upadhyay\***

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Interview 11.11

**Dharamshibhai Shah\***

**Objectives**

The people of country side are gradually forgetting the cultural heritage, the original dialect and the traditions of human relationship. As a result various offenses have increased.

Various cultural programmes are organised by state government, but they are not being arranged for the real beneficiary.

Art is also for common public. Generally it is demonstrated for the upper class or exhibited in foreign countries. The political leaders also make it a tool for their political motives.

**Problem & Recommendations**

1. Cultural programmes sponsored by the Govt. are not object oriented.

Cultural programmes should be governed and organised by the devoted persons in the field.

2. Cultural programmes are not being organised for common public.

The programmes should be selected for laymen, the theme should be according to traditions and common people should be involved.

3. Human relationships are losing value and offences are increasing.

Society capable to understand human emotions should be created with the help of cultural programmes arranged in streets, offices and industrial houses.

Cultural programmes and training should be related with social traditions and festivals of regions.

**Ghanshyam Upadhyay\*\***

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*The Managing Trustee of 'Kalakshetra', (centre for Dance & Music Education), Bhavnagar. Education & Training in Dance & Music: (1) Shri Shantiniketan (2) Shri Udayshankar Culture Centre (Almoda) (3) Bharat Natyam (Madras) (4) Kathakali (Malbar) (5) Kathak (Varodara) (6) Odissi (Katak) (7) Sangit Visharad (Equivalent to Ph..) [Mumbai]. Publication: Nartan Darshan - a book on dance.*

\*\* Bhavnagar.



## GROUP 12: MODERNISATION OF THE GOVERNMENT

### (i) EXPERTS

Mr. N Vittal, Chmn, PESB  
Mr. Urjit Patel  
Mr. J L Saha, Prof., IIM  
Mr. Hariprasad Vyas

### (ii) RESOURCE PERSONS

Mr. Ashok Bhatia, ACS, GAD  
Mr. G L Bhagat  
Mr. S R Rao, Muni. Commr. Surat  
Mr. Subir Roy, NIC  
Mr. P.K. Das

### OBJECTIVES:

- \* To transform the Government into being responsive, people friendly and effective.
- \* Make a complete break with the British legacy of Babudom
- \* Bring the Government to the 21st Century.

### KEY SUCCESS FACTORS:

- \* Key success factors for the Government (and hence for all employees):
  - (i) Catalytic
  - (ii) Market driven
  - (iii) Mission driven
  - (iv) Competing
  - (v) Enterprising
  - (vi) Result oriented
  - (vii) Community oriented
  - (viii) Customer driven
  - (ix) Anticipatory, and
  - (x) Decentralised
- \* Reduce number of layers of Govt. to 6 or 7 - to disable automatic increments and promotions. "Excel, or stagnate, Or move out".
- \* Make all rules uniform.
- \* Develop measures/criteria for success, rewards for action, disincentive for corruption, inaction. Transparent system.
- \* Business like approach. The officer should meet the customer, and pass him to the appropriate officer for action with time bound response.
- \* Each officer to present his growth target and SWOT analysis - benchmarked against other successful models.
- \* Use outside consultants (international auditing firms) for conducting promotional reviews - by superiors, peers, subordinates, and track record of action, corruption and inaction.

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**PROBLEM****RECOMMENDATIONS**

- \* Outdated laws
- \* Automatic re-funding
- \* System inefficiency
- \* Low System effectiveness
- \* No transparency
  
- \* Archaic laws and safety cushions
- \* Innovation not appreciated or institutionalised
- \* Too much paperwork

Review of laws  
Zero Based Budgeting  
Integrate through IT  
Management audit, cost audit  
Gujarat Freedom of Information Act so that access to Govt information becomes more easy and widespread.  
Broad-based, unbiased review of laws

**PROBLEM****RECOMMENDATIONS**

No incentive for action  
No disincentive for inaction  
No transparency

Redesign review & promotion policy  
Broad-based feedback by a third party  
Gujarat Freedom of Information Act

**ACTION PLAN:****(i) SHORT TERM (2-3 YEARS):**

- \* **Reengineering Government Process:** exercise aimed at clarifying the mission of Government as a whole, and each department as a part thereof - this would involve a public poll and embody the citizens' demands and expectations of Government;
- \* rationalise the structure - number of layers reduced for simplicity of purpose, reduce overhead, flatten the pyramid and thereby reduce the number of automatic promotions and increments;
- \* rationalise the Standard Operating Procedures (i.e. rules) since every successive year brings additional laws but no reduction in old and outdated laws, which results in a snarl of red-tape;
- \* introduce a Review and Promotion Policy based on feedback from superiors, peers (from own and other departments) and subordinates, and track record of action, corruption and inaction - which will be audited by third party firm of auditors;
- \* integrate Information Technology into the processes of Govt. (which have to be suitably redesigned), wherein information is entered into the network only once but used multiple times.

Focus areas:

1. **Database of Innovation and Lessons Learned.** All innovations made at any level and in any organisation/department, will be recognised, rewarded, and documented here. This database becomes a repository of such innovations.
2. **Information Technology :** A window on Information Technology developments worldwide; it will ensure standardisation across Govt. departments so that data can be transferred, and same version of software resides on all computers across Govt.; it will purchase/ integrate/ develop software; it will train all Govt. employees on Computer; it will undertake / co-ordinate maintenance;
3. **Govt. Process Re-engineering:** Actual implementation of the suggestions / action plan drawn up by consultants; continuously examine and ratify the Standard Operating Procedures (i.e. examine and formalise redrafting of rules / consolidation of procedures /removal of archaic rules, etc.); be the nodal agency for reduction in the number of forms to be filled up in Government offices; focus on reduction in paper by at least 5-10% per year; take inputs from public at large on Govt. processes that hinder progress of society;
4. **Database of top resources worldwide** - Identify all top Gujaratis (i.e. people interested in Gujarat), map their achievements, and establish contact.
5. **Database of all Govt. institutions.** Every person drawing Govt. salary has to present a plan as per Key Success Factors listed above. His growth and success will derive from his own plan.
6. **Analysis of Investment Trend and projection of Infrastructure required:** (include analysis of Maharashtra, Karnataka and Tamil Nadu's experience and strategy). Need to prepare 20 year perspective plan, abstract to a Master Plan for next 10 years.

Focus: Ports, Roads, Power, Education, Telecom, Banking, Social Infrastructure. Policy on Incentives. IPP policy.

7. **Interactive Website on Internet** - Interactive, focusing on Development of Gujarat, including Industrialisation, Tourism, etc.
8. **Freedom of Information Act**

The co-ordination cell will draw as full-time resource persons 5 young and capable officers from different sources - Industry, Govt., academia, etc. + secretaries/ assistants + computers on loan from different departments. Time Frame: 3 months, The atmosphere has to be that of an academic center of excellence.

## **Public Participation**

### **Comments**

**Manubhai Shah\***

Public participation is the sine qua non of democracy. But more than that, it is the least expensive and time consuming regulatory process of ensuring public accountability of providers of public services and regulators leading to optimum utilisation of scarce natural and other resources ensuring efficiency, economy and avoiding waste. The process also shall ensure greater transparency and can stem corruption and criminilisation of policies, particularly when the process is strengthened by access or freedom of information law the need for which is increasingly accepted, as a condition precedent.

Public participation has to be at two levels; consultative and participative.

Both the dimensions, presuppose the acceptance of distinction between control and regulation in the process of economic liberalization, logical consequence therefore is the regulatory authorities being in place and working effectively in a quasi-judicial formal manner, with locus-standi to citizens' non-profit groups.

Such regulatory authorities, include effective, "Food and Drug Administration; Occupational Health and Safety Administration, public utilities commission covering transport, communication, energy, and similar public utilities, securities and exchange board of India, Insurance Regulatory Authority, Telecom Regulatory Authority, Environment Protection Agency supported by Environment Protection Agency supported by Environment Research ;Institute including centres for disease control, Highway Safety Administration, Consumer Products Safety Commission and the life.

Non-profit citizens' groups shall also be awarded adequate costs for participation with professional inputs in decision making processes. The system shall provide for effective disgorgement of unjust enrichment made by the providers of goods and services including punitive or exemplary disgorgement to the extent of three to ten times such unjust enrichment made by team during last three years depending upon the merits and gravity of the matter.

Consultative process of public participation shall be formalised by providing a place in the advisory Committee in the fields of planning and execution in the aforesaid and other areas of fully utilise expertise, creativity and talents of the Citizens and their groups to take more mature and acceptable decisions to the public. Such effective consultative process shall hopefully eliminate the peoples desperate need to fight in the streets through stone throwing, arson and destruction of public and private properties and beating and killing of demonstrators by police brutal force and also citizens' groups taking issues to the Courts, Commissions and tribunals with adversial role relationship.

Recently announced composition of Industrial Advisory Board by Government of Gujarat requires reconsideration so as to encourage public participants as aforesaid.

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**Comments**

**Ashok Bhatia, IAS\***

**1. Objectives**

- (a) To transform the Government into being more responsive, people friendly and effective.
- (b) To make the Government accountable to the people
- (c) To ensure transparency in the functioning of Government

**2. Background**

With a view to achieving the goal of growth with equity and in the context of the policy of economic liberalisation a need is being felt to modernise the Government.

**3. Problems**

- (a) Review of existing laws and office procedures
- (b) Upgradation of the skills of Government staff
- (c) Access to Government information, procedure, decisions and laws etc.
- (d) Provision of better communication links, office automation equipments and regular auditing of management and cost.
- (e) Decentralisation
- (f) Strengthening of grievance redressal machinery at various levels.
- (f) Review of promotion policy.

**5. Action Plan**

**(A) Short-term (2-3 years)**

- \* Streamlining of various office procedures
- \* Decentralisation wherever possible of service delivery administration and devolution of powers and resources.
- \* Improving the communication network and office automation

**B. Mid-term (5 years)**

- \* Review of all Government posts, qualifications and experience required for such posts. Upgradation of skills of Government servants.
- \* Necessary amendments in the requirement rules and service conditions which will aim at recruitment of persons with higher skills and maintaining the level of efficiency in the job.

**C. Long Term (10 years)**

- \* Continue upgradation of skills by introducing modern methods of training.
- \* Use of automation may be made compulsory in Government offices.
- \* Trimming ;down of Government staff by resorting to privatisation, contract system in the activities/services wherever found possible.

**6. Resource Needed**

- \* Effective utilisation of available resources will have to be ensured though funds may be initially required for computerization etc.

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\* Additional Chief Secretary, (Per), General Administration, Sachivalaya, Gandhinagar

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**Comments**

**Jahar Saha\***

**Objectives**

To transform Gujarat Government into a responsive, people friendly and effective organisation.

To achieve the above through the use of modern information technology

**Background**

Government systems are designed with good intentions. However most often the spirit behind them are lost in their implementation

**Problem**

Lack of transparency

**Recommendation**

There must be a Gujarat Freedom for Information Act to make the access to Government information easier and widespread

To computer network different Government departments for sharing of information.

**Problem**

Nobody seems to know how exactly a government system works, no clear instructions, steps are not clear, forms are ambiguous, etc.

**Recommendation**

We need to look at some of the systems to make them simpler, procedures, streamlined and forms self-explanatory.

**Problem**

Many laws have lost their utility

**Recommendation**

Archaic laws should be identified and should be amended

**Problem**

Government employees feel that they have no incentives for action and there are incentives for inaction.

**Recommendation**

We need to redesign the jobs and review the evaluation systems.

**Action Plan**

In my view we should identify about five governmental systems which affect large proportion of people of affect developmental activities of the state and re-examine them with a view to making them simpler and effective. Whenever possible, we should introduce information systems should be re-examined, departments should computer-networked making the access to information easier and widespread.

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\* Professor, Indian Institute of Management, Ahmedabad

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**Comments**

**S.R. Rao\***

**Short Term Action**

Secretary of each Department of Government should be given personal targets of identifying just two or three key activities in which there is considerable interface with the citizens. For example in case of Urban Development Department, these key activities which concern citizens could be building permission, connection for water taps, assessment of property tax etc.

My opinion, based on Surat experience is that even under existing laws, rules, regulations etc. it is possible to make Government citizen interface free of harassment and deliver quality services in fixed time.

If each Secretary undertakes this exercise in right earnest results can be assured in matter of couple of months.

**Medium Term Action Plan**

This requires doing away altogether by way amendment to Arts. 310 & 311 of Constitution of India, the safety cushion provided to government servants. These fare-guards, though well intentioned for protecting the impartiality of civil servants, are being used as shields for not only non-performance and sub-optimal performance but also for actions which are patently against the public interest.

## XII. MODERNISATION OF GOVERNMENT

Pravin Sheth\*\*

Under the Project, "Development of Gujarat" of the Government of Gujarat, sponsored by Sardar Patel Institute of Economic and Social Research, a workshop was conducted in which administrators working at different levels and functional areas, political scientists and NGOs/Social activists participated. This report is the project of their interface. The report refers to the approach needed to modernise the Government as well as specifics of administrative reforms. So also certain points or "problems" not listed in the format prepared by the Group 12 earlier but vitally related to the objectives stated by it are also identified and recommendations offered. All this will help develop a New Administrative Culture.

With the transformation of the colonial administration into democratic administration, the state in the process has changed its focus to welfare and then development administration. And in the new context of liberalisation it needs to reorient itself to evolve a techno-managerial government to help it occupy the top slot among the developed states of India.

However, it has also to be sensitive to meet the needs of the common people and respond to the imperatives of a state committed to reach out to the lowest and weakest layers of the society. In any framework of modernisation of the Government, we shall have to balance the imperatives of a techno-managerial state and the need to evolve a caring state, nursing the concerns for the people.

### Recommendations

#### Outdated and Archaic laws

- The citizen should have the minimum burden of having to remember the laws that affect him. He should not face the maze of laws.
- "Sunset laws" pattern as in USA be adopted here. Also simplifications of laws.
- Make the laws uniform, e.g. law related to non-agriculture (NA) land. Removal of requirement to get NA permission for industry only is discriminatory. It may be extended to use of land for residential purposes also subject to certain goals of the State like equity and social justice. So also in case of relaxation of 8 km. of land.
- Application/conformity with the law should be painless. Say, the citizen can pay sales tax through computer. Consolidation and simplification of laws be attempted.
- Blue books edited and put in intelligible form containing Government Resolutions etc. should be prepared and easily made available to the citizens in government offices and public places like major libraries and taluka panchayat offices. Rules and Regulations under laws should be rationalised from time to time, and be made known to the public.

\* Report of the District level meeting held on 28-4-97 at Gandhinagar

The list of participants is given in Appendix-I

\*\* Peace Research Centre, Gujarat Vidyapith, Ahmedabad.



- Copies of laws with necessary explanation should be made available at minimum price. Outdated laws, (say Evidence Act) be reformed. Rent Act be abolished or radically reformed. Simplification of laws - laws regarding urban development.
- Codification at Index B a trend setter - but it serves a certain class of people. It should be also attempted for the common man.

### **Automatic refunding**

- Refunding and payment should be made time-bound. Simple procedure and single point or on the spot clearance of the class of refunding to the bidders who fail to clinch the tender, contract, etc.
- Pensioners' plight : After retirement, it takes more than a year to get pension clearance. He/she has to give the certificate to the bank/pension office regarding his/her being alive every year. So also regarding tax certificates. Rules for fixing and providing the money should have a human feel.

### **Law system effectiveness**

- Institutionalisation of cooperative relations between NGOs working for the beneficiaries of development schemes and anti-poverty programmes on one side, and the line and staff level of personnel of the departments concerned.
- Once the Government makes a decision and declares its policy in the interest of a socio-economic group or a community, its implementation should be a routine matter, e.g. Government's decision to give land entitlement deeds for about 50,000 ha. to the tribals in the eastern tribal belt of the State, Minimum Wage Act, etc. Even after the publicly stated decision by the Minister, if NGOs working for the tribals have to often visit Gandhinagar and the Chief Minister for obtaining deeds, it leaves bad taste and takes away the gloss and grace by a tardy bureaucratic procedure.

### **System inefficiency**

- Cursory but "surprise" inspection needed. Area or territory to be supervised must be commensurate with the span of control.
- On the spot training: The supervisor should explain his subordinate how to handle the work at the very point of the problem.
- High level team to dispose of the deadwood or backlog of work.
- Maintenance of daily diary of one's work and its check up.
- Codification of office procedures, publishing of manuals.
- Frequent transfer of officers in administration and police should be avoided. Spoils system approach in civil services at the higher level demoralize the officers and affects the efficiency.

### **System Efficiency downsizing of the workforce**

- Monetary compensation to redundant personnel or those opting for "the Golden hand shake". Management approach to their rehabilitation after proper training in skill needed for new functions.
- Reduction of points in chain of command to avoid delay. Officer-oriented system in place of routine system.

### Improving the System and work accountability

- Local village administration like the Talati-cum-Secretary is a maximum contact point. But there is no regulation and control over it. Major subjects of public need are land record, civil supply/fair price shop, police, development (primary education, health and sanitation credit, supply of agricultural input, drinking water, road and electricity). Such a large network of services is difficult to be monitored and regulated in the present system.
- But how to hold the village school teacher responsible? Whether classes are held and teaching done? A villager, as elsewhere, has to make 3 to 4 visits to the gaun-chaura or the panchayat to get a copy of the record of the land-plot in the village. There is a "command and control gap" between different levels - federal-state-local. Administrative linkage is not clearly and smoothly established. Again, because of the Centrally initiated and State sponsored schemes requiring execution at local level have increased the burden of the local development administration and cluttered the space of various agencies. Programmes like adult literacy have rather increased the burden of the primary school teacher who can not perform even his main role in the school. Supervision is needed most intensely at the local level. But bigger the Government has become, less effective it has proved.
- The system of publishing annual administrative reports should be undertaken on a regular basis. Disincentive for inefficiency which can be specifically evaluated.

### Innovations

- Statusquoist tendency inherent in administration be removed. In specific departments "part-time consultancy" cell be formed. Experts from private non-governmental organisations (like Indian Institute of Management, Sardar Patel Institute of Economic Social Research, M.S. University Department. of Social Work, partment. of Political Science and Gujarat Vidyapith) should be invited to provide private consultancy to ensure that administrative lethargy is removed, staff is charged with a sense of despatch and administration becomes effective.
- Voluntary agencies should be involved where possible. Greater use of NGOs and field level agencies be made.
- Office hours and working time need to be rescheduled (as in Bhutan and some states) to suit the seasons and in keeping with ensuring ambient environment for optimal level of efficiency.
- Communications technology, mobile diagnostic camps for the purpose of improving and facilitating the administration at district level and down the line with the help of private consultancy.
- Use of data by imaginative use of technology, say via. satellite. In Gujarat, such facility is available at district level also. Arrangement be made for their use. Use of data through remote sensing and teleconference for communication and decision making across the state Sachivalaya and district administration should be explored. Two-way video - one way audio pattern of communication be made possible. How to use programme, capsule courses. Case study is a very educative method of training in such a case, e.g., Case study of S.R. Rao's Surat Municipal Administration.
- If effectively used all these innovations will telescope the administrative procedure in the "staff line" structure, save time and will avoid expenses of T.A. and D.A. of the personnel.
- Voluntary agencies should be associated in such training programmes. Centres of management and audio-visual communication agencies also be associated with such training programmes. In-built system of incentives to those who innovate and take initiative.

### **Incentives**

- Burn out Syndrome among good and clean officers in the present system. A clean and efficient administrator is increasingly becoming an "endangered species".
- Their services should be duly recognised with schemes made to honour them with a "large measure of non-financial Award" by the Government and in the society.
- Those who have consciously trained or brought up the subordinate by their caring approach should be appreciated.
- "Parallel administration" outside the legitimate administrative set-up cultivated by the brokers and political middle men should be discouraged.
- Acidic criticism may work as disincentive; but friendly and constructive criticism would act as the incentive.
- Case studies of L.R. Dalal (Bharuch and state level), Asoka Mitra (W.Bengal), Pimputkar (Maharashtra), S.R. Rao, Kuldeep Sharma, and many others should be prepared and used in training.

### **Inter Departmental Coordination**

Handling of the work should be based not only by files, but through approval by committees. The committee can delay the proposal of a case only for two meetings. When the case pertains to more than one department, such a decision pattern by committee comprising officers of the departments concerned will help escape hurting of ego of the department and shuttlecock like cross-department treatment of files.

### **No Transparency**

Instead of conventional file system, project profile should be prepared on computers. So that when a citizen or a company whose case is pending with the department visit it, details and status of his case can be easily traced on the screen. Through Internet, such a case which involves action at many levels (district and the Sachivalaya) can be handled by officers operating at different levels. Connectivity can ease the citizen's difficulty in moving out from one to other level or office as details of his case are available on computes located in different offices.

There should be no problem for the common man to understand the laws and availability of services in the Government offices.

It should be clear in the office as to who stands where in the queue? Say, regarding the number in the employment register, grant of land, opportunity of subsidy (amount, when and how?). Publication regarding such points be easily available to applicants for job, loans or subsidy, etc.

### **Open Government**

"Gujarat" periodical should be restarted but in a clearly result-oriented format and engaging style. It should record every new law, GRs etc. in simple form. Instead of becoming propagandist it should be truly informative.

### **People-orientation**

In many offices in the district, proper arrangement of even sitting are lacking for visitors. The functionaries from the top to the bottom must treat the citizen not as an applicant but as a master.

Machinery for redress of citizens grievances should be activated and norms for their time bound redressal should be put into practice. Incentives be given to those who do quite well.

## **General/Other problems**

The course of Lok Adalat as a participative problem-solving and dispute settlement mechanism should be extended to other areas as well.

Public hearing should be arranged. The conventional approach of moving the court regarding the dispute between the administration and the citizens/group should be minimised. Public hearing in place of the court should be widely encouraged. This will minimise the expenditure, and save time and strains associated with protracted judicial procedure.

In order to encourage participation of people, and thereby making the administration responsive to the people, constant monitoring, and healthy and constructive criticism by citizens' forums should be encouraged e.g. in basic needs or social development areas like health, primary education, water and electricity. There should be some social monitoring and auditing of these functions by the NGOs with the support of the Government where necessary.

Before giving contract for new buildings, repairs of the existing ones should be completed. There are many blighted government schools, hospitals, office buildings which need such care.

Merging of certain uni-functional corporations e.g. housing boards and corporations based on Sanat Mehta State Finance Commission Report. Formulation of better line agencies and staff agencies and also with NGO help, integrate the inputs from low level (line) agency into the decision of the upper level (staff) agency.

## **Public Information ineffective**

Advertisement about the government schemes and public document for personal identity and use (like ration card, ID etc.) should not be propagandist but informative.

## **Training-operationalising the reforms**

Introduction and operation of the new communication technology will require creation of relevant infrastructure and training of functionaries at different levels and across departments/ offices/ agencies horizontally. In order to train them in the new management and communication skills, cooperation of NGOs/professional centres should be obtained on contract basis. This will also promote a sort of private sector competence and quality in the state administration.

Designing of the content and methods of training should be done. Selection of proper trainers and trainees be done and its feedback be obtained. Continuous training of imparting vertical and horizontal communication skill should be given in Gujarati and English. So also training for proper drafting skills and oral communication be given.

## **Conclusive remarks**

In place of a Big Government, and a flabby administration, we need to carve out a facilitator government.

Competence and result oriented managerial approach of the private and professional sectors and responsive, people oriented approach of the voluntary sector need be integrated in the public administration system. All this requires the formation of a high level committee of reform-minded experts and administrators with a mandate to give its time-bound report for modernising the government.

## 12 MODERNISATION OF GOVERNMENT

S. Ramachandran\*

### Background

Government is a traditional set-up. It lacks adequate facilities. It is not able to meet the challenges.

### Problems

Gujarat has lost out 40 years in blindly following the local languages, when the option to use English was available when the new state of Gujarat came into existence. The international language namely English has been totally neglected. It is a precondition of development that there should be a prevalence of English education. The present generation of Gujarat lacks the minimum knowledge of English. Most of the modern knowledge is available only in English. For example, the problem of mass computerisation and technology is possible only through the medium of English. Unless Gujarat goes ahead in imparting compulsory English at least upto matriculation level it will not be of any use of introducing modern technology in Government. Since most of the work in Government is transacted in Gujarati language, which hampers use of modern facilities, like computers, communications data processing etc.

The project of electronic data processing to be set up at district level is well received. This may be updated with the help of computers from time to time.

Ramesh R. Iyer\*\*

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\* Retired as Assistant Director General, Dak-Tar Bhavan, New Delhi, (P & T).

\*\* Lecturer in Economics, Department of Economics, M.S. University of Baroda, Vadodara.

**Interview 12.2**

**Thomas Panthom\***

**Views:**

- a) The problem of english education is acute but should be resolved.
- b) Provide modern equipments.
- c) Data should be collected for the preparation of maps and charts.
- d) Computers should be duly installed. People may be sent for refresher courses for proper training in computers, also provide on the job training.
- e) Reservation at any of the counter in Railway station should be computerised.
- f) Electronic data processing units to be set up at district level.
- g) Human development to be given more importance instead of human resources for the expansion of statistical division.

**Ramesh R Iyer\*\***

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\* *Department of Political Science, M.S. University of Baroda, Vadodara.*

\*\* *Lecturer in Economics, M.S. University of Baroda, Vadodara.*

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**Interview 12.3**

**P.L. Jani\***

**Objectives**

- [1] Law and order should be free from politics
- [2] Minimisation of crime in society
- [3] Efficient recruitment system in police department
- [4] Introduction of computers to catch criminals

**Background**

Introduction of computer system in police administration

**Problems & Recommendations**

- 1. Management of discipline  
New institutions to be established as in the advanced countries
- 2. Management of Staff  
Change in line management structure in police department is recommended.
- 3. Problems of efficient vehicles  
Vehicles of new designs should be introduced
- 4. Management of prisons  
Repairing and Maintenance of prisons should be given priority

**Action Plan**

**Short Term [2-3 Years]**

Link to be established between Police and Home Guard services. Senior Officers to be equipped with pager system.  
No interference by political leaders

**Medium Term [5 Years]**

Reforms in district Police Committee are required. More Non Government Organisations and Lawyers should cooperate.

**Long Term [10 Years]**

Close Circuit TV link for Police Administration should be introduced

**B.M. Jani\*\***

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\* Commissioner of Police, Race Course, Rajkot 360001.

\*\* Reader in Economics, Saurashtra University, Rajkot 360005

Interview 12.4

P.L. Jani\*

**Issues**

- [1] What is the basic difference in Rural and Urban crimes?
- [2] How far mobile court and quick disposal of cases are inter-related?
- [3] What kind of additional facilities are required to manage police administration?
- [4] Your suggestions for the ninth five year plan:

**Recommendations**

- [1] Jail administration and police department administrations are different. Both are dealing with different nature of criminals. Police-officers should be well aware about police function (psychology of criminals). Law graduates are necessary in police department in Inspector cadre. Promotion formula for PSI cadre needs thorough change.
- [2] In urban area elite people are criminals, whereas, in rural areas jobless poor people and uneducated are committing crimes. However, nature of crimes are different in Central Saurashtra and Coastal Saurashtra, particularly in Porbandar area. Main community is famous for all types of crime.
- [3] Mobile Court and Lok Adalat are welcome for speedy disposal of cases. Still civil crimes and other crimes cannot be given due justice. Our judiciary system is expensive and takes too much of time. Alert and active police department is prime necessary. There should be a co-ordination between local police and custom.
- [4] Special training is required to be given to Crime police and the staff to tackle with crime and criminals. Quality of uniform and police housing needs to be improved. Repairing of old mobile vans is a must. Time bound promotion to police inspector, appears to be relevant for effective police administration.
- [5] (1) Horse-riding police for night patrolling are required.  
(2) Privatization of C.I.D. services is necessary.  
(3) Police protection be provided to weaker sections and women.  
(4) Less interference by political leadership in the police administration is very much welcome.  
(5) Special training to the police staff should be given.  
(6) Stop criminalization in political system.

B.M. Jani\*\*

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\* Commissioner of Police, Race Course, Rajkot

\*\* Reader in Economics, Saurashtra University, Rajkot.



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Interview 12.5

K.K. Oza\*

**Objectives**

To make the government functioning more effectively.

**Problems**

- [1] Lack of follow-up of the rules and implementation.
- [2] Complexity of procedures.
- [3] Lack of true decentralization.
- [4] Wider control over the system.

**Recommendations**

- [1] Make Panchayati Raj more effective.
- [2] Encourage market mechanism.
- [3] Reduce the excess power of bureaucrats.
- [4] Make the system more open.
- [5] Raise the level of honesty.

**Resources Needed**

Developing patriotism through training.

Kishore M. Joshi\*\*

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\* Ex. G.M., S.B.S., Neelambagh, Bhavnagar.

\*\* Lecturer, Department of Economics, Bhavnagar University, Bhavnagar.

**Interview 12.6**

**Madhubhai Savani\***

**Objectives**

- [1] To modernise entire Government machinery to perform most efficiently.
- [2] To train and retrain and reorient all personnel to be efficient, devoted, responsible, responsive and sensitive to the public.
- [3] (a) To provide all modern equipments, and communications facilities to offices and personnel.  
(b) To devise comprehensive system of incentives and dis-incentives.

**Background**

- (a) Entire machinery functions only at an average efficiency,
- (b) There are constant delays in decisions and implementation. Absence of commitments is felt at all levels,
- (c) Attitude of indifference to public is felt.
- (d) Hard attitude and behaviour of administration is annoying.
- (e) Organisation, Administration and management is out-dated,
- (f) Inefficient work distribution among personnel hampers the work- culture
- (g) Over centralization creates problems.

**Problems & Recommendations**

1. Traditional functioning and low level of efficiency  
Modernise functioning at all levels. Enforce work norms at all levels.
2. Out-dated organisation, administration and management.  
Effectively modernise administration including supervision.
3. Lack of congenial work environment, absence of modern work culture etc.  
(a) Change recruitment policies  
(b) Enforce scheme of incentives

**Action Plan**

**Short Term [2-3 Years]**

Enforce rules and regulations, supervise enforcement strictly

**Medium Term [5 years]**

Implement schemes of incentives-dis-incentives Modify service rules to create excellent work culture. Urgent actions are needed for this.

**Long Term [10 Years ]**

Provide all modern facilities. Reorganise each department on modern lines. Initiate promotional development functioning.

**Ketan Dinkarry Trivedi\*\***

\* Retired Teacher, engaged in Development of Children and Education. Social Reformer.

\*\* Journalist.

**Interview 12.7**

**Bhikhubhai M. Mehta\***

**Objectives**

- [1] To modernise attitudes, behaviour, approach etc. of personnel.
- [2] To provide facilities to generate effective leadership at all levels, in all sectors.
- [3] To make administration fully "accountable".

**Background**

- (a) Administration has grown in size.
- (b) All three wings, Legislature, Executive (Political and Administrative), Judiciary- are not efficient and public spirited,
- (c) Modern developmental/promotional, administration organization/ management are absent.

**Problems & Recommendations**

- 1. Absence of modern organization in Administration and Management.  
Introduce Modern system of governance.
- 2. Domination of regulatory, excessive rules and regulations, Ad hoc work distribution prevail.  
Distribute work scientifically, and enforce "accountability"
- 3. Delays, corruption, work avoidance, Indifferent functioning  
Leadership to be provided - team work to be encouraged, people oriented work culture needed.

**Action Plan**

**Short Term [2-3 Years]**

Set up District wise training Institute for Govt. personnel. Train them in human approach and scientific work-methods.

**Medium Term [5 Years]**

Make "Yoga" or "Meditation" compulsory to stabilize, energize, sympathize minds, hearts of personnel for creating excellent work environment

**Long Term [10 Years]**

Devise system of incentives - disincentives, experiment recruitment/ appointment on contractual basis.

**Subhashchandra Shankerlal Nayee\*\***

\* Conducting several social welfare activities, a pro-poor doctor running a free dispensary set up by a trust, founder of "Dipharti" which is conducting several welfare activities.

\*\* Lecturer in Psychology.

Interview 12.8

Amritlal Khimji Shah \*

**Problems**

- [1] Linking offices at Taluka-District level.
- [2] Training of staff.
- [3] Lack of uniform policy and absence of coordination.
- [4] Computer and Unemployment Problem.
- [5] Problem of getting display information — maps and charts.

All the offices at Taluka/District level should be equipped with modern equipments like fax, tele-communication, computer-linking etc. for running smooth administration. At present, telephone facility is not adequate and upto the mark.

The staff at work should be trained in efficient use of modern equipments, so that various informatory data, urgent messages etc. are promptly transmitted and actions are taken in time.

Uniform policy should be adopted and full co-ordination should be maintained by Semi-Govt. and corporations. So that the individuals, industrialists, businessmen, while dealing with Gujarat Industrial Investment Corporation, Gujarat Industrial Development Corporation, Gujarat Electricity Board, Gujarat Small Industries Corporation and such other number of Corporations, may not be compelled to frequently rush to these offices for solving their ticklish issues for a very long time.

All the Departments and Departmental Heads should work as representatives of one Government body and people at large should not be left to the mercy of respective department. Usually common citizen/laymen are made scape-goats whereas influential people benefit upto the maximum. This should be checked.

Taluka-District level offices should work in close co-ordination among the Departments to provide timely feed-back to the State/Centre through complete computerisation. However, care should be taken that unemployment situation or idle man-hours are not encouraged.

Taluka-District level administration should remain in constant touch with the interior parts of the taluka headquarters through Panchayat Offices to maintain law and order situation and to tackle natural calamities like floods, drought, fire, accidents, disease etc.

Talukawise maps giving detailed information of taluka boundaries, main roads, sea-levels, rivers, rivulets, ponds, grazing area, crop area, bridges, names of villages, roads, important sites etc. should be prepared by the offices for educating the common public to know the importance of their own area.

Likewise, District level maps should be displayed at all important offices. Ultimately State level maps giving comparative figures with that of the country should also be displayed.

I.K. Patel\*\*

\* A successful Industrialist. He positions of Chairman, Director, Partner, Trustee, President, Vice-president in various companies. Member of Governing Body of Industrial Extension Bureau. He is actively associated with various Clubs, Organisations, Financial Institutions, Government, Semi-government Establishments, Health Centres, Educational and Cultural activities etc.

\*\* Lecturer, Shri Vanraj Arts & Commerce College, Dharampur, Dist, Valsad.

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**Interview 12.9**

**K.C.Mehta \***

**Problems**

1. Grassroot level participation neglected
2. No clarity in policy
3. Bureaucrats are disheartened sometimes

**Action Plan**

**Short Term [2-3 Years]**

More participation of people at the grassroot level is required

**Medium Term [5 Years]**

There should be no interference by politicians

**M B Dave\*\***

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\* Asstt. Commissioner, Surat Municipal Corporation. He is in charge of Finance. He attended several national level seminars on Local Finance.

\*\* Reader, Dept. of Economics South Gujarat University, Surat

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**Interview 12.10**

**M.B. Dave \***

**Problems**

- [1] Those who are connected with planning have little or no experience at the grassroot level.
- [2] No clarity in policy leading to difficulties at the implementation level.
- [3] Politicians have vested interests, hence interference in administration.
- [4] Bureaucrats find it difficult to take decisions in absence of clear vision.
- [5] Bureaucrats are disheartened when they are blamed if anything goes wrong, so delay in decision making.
- [6] Even though there is decentralisation on paper, in the reality there is centralisation.

**Suggestions**

- [1] Planning should start from below, i.e., at the village level.
- [2] People who have first hand experience of development and planning should be associated at the grassroot level.
- [3] There should not be any political interference in the plan implementation.
- [4] A Committee of all-party and non-political persons to be formed at the local level to supervise and monitor implementation.
- [5] Decentralisation in reality to be achieved.

**Action Plan**

**Short Term [2-3 Years]**

Committees of non political persons be formed at local levels to look after planning administration.

**Medium Term [5 Years]**

Planning should start from below.

**Long Term [10 Years]**

Decentralisation in real sense should be achieved.

**G D Thakore\*\***

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\* He has completed several research projects. He has published many articles in the journals on development administration

\*\* Reader, Dept. of Public Admn. South Gujarat University, Surat

**Visubhai B. Patel\***

### **Administrative Setup**

Priority-wise, our Government should undertake and reorganise the law and order machinery; which means following some of the "Seshan Touch Techniques" in controlling the bureaucrats and law enforcement officers and other cadres.

In bureaucracy, 'one man show' should be discouraged as it centralizes the power, instead decentralise the power.

All strong and vigilant supervision on municipalities and municipal corporations is needed for betterment who spend public money for public utilities. Our cities and towns are not upto the standards. It requires an "Improvement Plan".

In short, we suggest a well known "Kissinger shuttled Diplomacy" by a person not from the Government but from outside, a minister without portfolio, a goodwill ambassador to oversee the completion of project.

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\* MBA (U.S.A.) M.S.P.A. (U.S.A.), 409 Premier Chambers, R.C.Dutt Road, Baroda.

## GROUP 13. GLOBAL RESOURCES FOR GUJARAT

### (i) EXPERTS

Mr. R C Shah  
Mr. M C Bhatt  
Mr. Urjit Patel  
Mr. Mukesh Patel

### (ii) RESOURCE PERSONS

Mr. V V Rama Subba Rao, ACS F.D.  
Mr. Rajesh Kishore, Secy(EcoAffrs)FD

### OBJECTIVES:

Identify all possible sources worldwide that can be tapped to meet the funding requirements of Gujarat's economic and social development programmes.

### PROBLEM

The flow of funds into Gujarat is not only well below the national average, but has been diminishing over recent years.

Sources of funds for Government and Private (i.e. non-government) sector are different.

### RECOMMENDATIONS

The state has not been exploiting the full potential of foreign resources that can be tapped. Urgent steps are needed to reverse the trend fast.

Requirement by both these sectors should be clearly identified. The Government Sector could obtain funds from:

- \* Multilateral agencies such as the World Bank, the Asian Development Bank, UN agencies like the UNIDO, UNDP, FAO and the Commonwealth development Fund
- \* Bilateral: government to government transactions
- \* Special agencies such as ODA, KFW, OECF, CIDA, SIDA, DANIDA etc. who have been financing selected areas of interest to them.

The private sector could obtain funds from:

- \* Multilateral agencies such as IFCI, ADB and UN agencies like UNIDO, UNDP
- \* Export Credit Agencies like the Export-Import Bank of Japan and other countries.



No co-ordinated effort with foreign financing agencies

- \* Investment promotion agencies like European community Bank, European Committee for Investment Promotion
- \* External commercial borrowings and foreign equity participation.

A Cell should be established in the Finance Department which would function as a storehouse of information of the external resources available for financing government sector and private sector projects. The Cell should carry out close liaison and follow up with the Indian embassies and consulates abroad as well as foreign embassies and consulates in India.

Each of these foreign lending agencies has its own specific areas of interest which it would like to finance.

The state should make a careful inventory of all these sources and their preference (e.g. energy sector infrastructure like ports and roads, social sectors like slum improvement, education, child welfare and the like, etc.) Then the state should pose appropriate projects before them for financing.

No system for efficient flow of resources through private sector international banking and other financial institutions.

- \* A tie up between a reputed international merchant banker and one of the strong parastatal agencies. With the full support of the state government assured to such a venture, it would have a head start for channeling funds to the several mega projects coming up in Gujarat.
- \* The state government should also establish contacts with the prime international investment bankers.
- \* The state should also explore getting funds through several other instruments viz. bonds, mutual funds and specific project related financing. Such funds flow should be obtained by the private as well as parastatal sectors.

Need to have best assessment In order to attract quick flow of the external funds, it is essential that the state government carries out fiscal adjustment program

immediately and would continue to maintain a prudent fiscal policy. The financial health of the state government would have a great bearing on the assessment of the foreign lenders about funding projects in Gujarat. The beginning made recently in connection with the ADB loan is welcome.

No efficient mechanism  
to tap NRIs

In the present environment of liberalised economic policies, there is scope for flow of private investment considerable scope for inflow of funds directly into the state, particularly from the NRIs. Special efforts should be made by the state government as well as the non-governmental organisations to invite such investors to Gujarat. The state government should identify the constraints for the free flow of such investments and make efforts to remove them at all levels.

## XIII. GLOBAL RESOURCES FOR GUJARAT

S. S. Mehta\*

01. In view of past long term trend of Gujarat economy of 5.1% per annum during 1980-81 to 1996-97, growth during the Ninth Plan can be envisaged at 7.75% p.a. compared to country's 7.0% p.a.
02. The aggregate growth rate of 7.75% p.a. for Gujarat implies a rate of growth of 2.5% p.a. for the primary, 10% p.a. for secondary and 8.16% p.a. for tertiary sector during Ninth Plan period compared to their past long term trend of 0.75% p.a. 7.61% p.a. and 6.61% p.a. for the respective sectors.
03. Since there is no estimate of Incremental Capital Output Ratio (ICOR) for Gujarat and any of its sectors, ICOR of 4.34 assumed for India's the Ninth Plan is assumed for Gujarat and its sectors also, which will be approximately true.
04. The total resources needed for the Ninth Five Year Plan for Gujarat for the projected growth of 7.75% p.a. is Rs.108554 crores at 1996-97 prices, which is 5.4% of country's investment of in the Ninth Plan.
05. The public outlay for Gujarat is envisaged at Rs.28,000 crores (25.8%), the remaining Rs.80554 crores (74.2%) will have to be from private investment.
06. The investment needed for primary sector is Rs.8950 crores for the envisaged growth of 2.5% p.a. during the Ninth Plan. Of this, the public outlay in the IX Plan is Rs.1996.70 crores (22.3%) for primary sector. The remaining Rs.6952.3 crores (77.7%) will have to be from private sector.
07. A sustained agricultural growth cannot be achieved without accelerating agricultural investment and credit availability which has remained more or less stagnant in real terms since the beginning of 1980s.
08. Ground level credit flow to agriculture for 1994-95 was Rs.346.56 crores which works out to be 5.9% of total term loan of Rs.5890 crores for India. NABARD has estimated that term loan credit flow to agriculture in the Ninth Plan is likely to be Rs.4405.85 crores.
09. However, Gujarat needs to create an institutional mechanism to attract private investment in agriculture to achieve a sustained growth of 2.5% p.a. in the IX Plan. At present, unlike industry, agriculture does not attract enough private investment. For attracting private investment, diversification of agriculture and allied activities will have to be worked out in addition to crop husbandry.
10. Investment needed in secondary sector for a projected growth of 10% p.a. is Rs.50406 crores. In this public sector outlay is Rs.6541 crores (14%) including Power. The remaining investment of Rs.43,865 crores (86%) will have to come from private sector.

\* Report of the District level meeting held on 1-5-1997 at Ahmedabad

The list of participants is given in Appendix-I

\*\* Professor of Economics, Gandhi Labour Institute, Ahmedabad

11. Major investment needed is in power sector for generation, transmission and distribution. During 1990-91 to 1995-96 installed capacity has increased by 741 MW i.e. 148 MW per year. However, the need is about 300 MW per year. In view of large projects in pipeline, it is hoped that needed investment in this sector will take place.
13. Tertiary sector includes both physical and social services (education and health) infrastructure. The need is to increase investment in social services infrastructure.
14. At present advances by scheduled commercial banks to priority sectors in Gujarat is about Rs.3950 crores at a credit deposit ratio of 48.4. If credit deposit ratio can be raised to 60% (this was achieved in 1975), the advances can increase to Rs.6500 crores. Deposits are increasing at the rate of over 10% p.a. Thus banks can provide funds to the tune of Rs.7000-7500 crores per year i.e. Rs.35,000 - Rs.37,500 crores during the IX Plan.
15. For this a close and healthy relationship between government and banking sector is called for.
16. Urban infrastructure investment needed upto 2001 is Rs.5460 crores.
17. Gujarat needs to work out state-sector specific ICOR for more precise estimates.
18. Gujarat must tap foreign direct investment and from NRIs for diversified agriculture, industrial activities, physical and social services infrastructure.
19. Promise of investment must be converted into reality at the earliest. In this, the greatest barriers are obsolete and outdated rules, regulations, procedures, and laws leading to large time and cost overruns. Gujarat should initiate mechanisms to change this process quickly so that it can have advantage over other states. Other states, like Gujarat, are still following status quo.

## 13. GLOBAL RESOURCES FOR GUJARAT

Nimish Shah\*

### Objectives

- [1] Overcome financial and technical bottlenecks to the development process
- [2] To promote/initiate collaborative academics/education

### Problems & Recommendations

1. To increase Import & Export in the State.  
Development of port is required should be 1st class in quality, particularly between Ahmedabad to Vapi coastal line, Container Depot is a must in the main cities of coast line between Ahmedabad to Vapi region.
2. Information System is not set up.  
Data Bank is a necessity for collecting, processing and selling information at a price.
3. To develop collaboration with foreign companies  
Infrastructure facility like International Air Port. We should attract Automobile Companies, Industrial parks like G.I.D.C. should be given every facility i.e. road, light etc.
4. Foreign Investment  
At least one branch of all foreign banks should set up in Gujarat. Main offices, head quarters of industries must be in Gujarat for financial transactions.
5. Low Labour Productivity  
Training programme compulsory. Any existing technical institute should be encouraged to attain IIT standard.  
Mechanical Engineer and over ten years experience in the field of industrial production, marketing and finance.

### Action Plan

#### Short Term [2-3 Years]

Finance and over all transactions of industries should done be from Gujarat. For data bank, existing institution like ORG be involved.

#### Medium Term [5 Years ]

Industries should have data bank and their own foreign expertise.

#### Long Term [10 Years]

Total Infrastructure development

Hemant B. Chauhan \*\*

\* Cosmos-Impex (India) Pvt. Ltd., 711-713 Centre Point, R.C. Dutt Road, Baroda.

\*\* Part-time Personnel Asst. (Administration & Accountant)

Interview 13.2

Mayak Dholakia\*

**Problems & Recommendations**

1. Government machinery is not efficient for clearance of and implementation of projects-political instability.
  - Identify trust areas for investment, procedure to be made extremely simple, Single Window Clearance, time bound clearance.
2. Weak Information Technology and telecommunication infrastructure emphasis on hardware instead more on software, non-availability of professional & managerial manpower, weak communication infrastructure-no high speed link to internet.
  - Gujarat to be marketed internationally-well packaged identify major international centres with a stronghold of NRIs and FIIs to give a comprehensive profile.
3. Lack of development of Ahmedabad as full-fledged international air port -limited for passengers & cargo.
  - Increase international routes via Ahmedabad enough capacity to be built up so as to facilitate trade.
4. No academic collaboration esp. institutional lack of international trade and business fairs.
  - Involve large section of Gujarati NRIs existing institution must introduce programs with specialized courses in closer interaction with industries two way consultancy [teacher to industry & industry to teachers]

**Action Plan**

**Short Term [2-3 Years]**

Appoint Gujarati NRIs in various countries on a continuing basis as liaison men for marketing Gujarat internationally-Ahmedabad Airport availability of dry docks organise a major international business/trade fair.

**Medium Term [5 Years]**

Set up International Trade Facilitation Centre organise thematic shows, strong information base to be built up.

**Long Term [10 years]**

Academic collaborations, comprehensive directory of industries, information about companies future plans-target countries for exports and imports-could be placed on the internet.

Hemant B Chauhan \*\*

\* M.S. Patel Inst. of Management Studies, Faculty of Management Studies, Vadodara 2. 1976-passed IIM, Jyoti Consultants-1980-90- Digital Innovations Pvt. Ltd. and Digitech International Ltd. as Director-1992.

\*\* Personnel Asstt. (Administration & Accountant), Department of Economics, M.S. University of Baroda.

### **1.Objectives**

- [1] Management of foreign direct investment flow
- [2] Their deployment in Infrastructure projects
- [3] Commercial projects

### **Background**

Efficient foreign exchange management for monitoring its flow

### **Problems & Recommendations**

- 1. Servicing to equity  
Powerful corporate sector and correct projects
- 2. Servicing to borrowers  
Strong borrowers having repaying capacity
- 3. Material management for projects  
Liberalise import policy for raw materials
- 4. Identification of correct profitable projects  
Economically viable and technically feasible projects generating returns should be formulated.

### **Action Plan**

#### **Short Term [2-3 Years]**

Development of joint sector projects, public interest should be funded from these resources

#### **Medium Term [5 Years]**

Development of public utility services needed for the state economy i.e. power, drainage, telecom, road development.

#### **Long Term [10 Years]**

Development of physical facilities, including urban capital projects

### **Issues**

- [1] How to manage foreign inflow of resources in Gujarat ?
- [2] What should areas/sectors for deployment of foreign resources?
- [3] What are the problems to manage resources?
- [4] Your recommendation and action plan for the IXth five- year plan?

## Recommendations

- [1] Banks and financial institutions should manage flow of direct foreign investment by inter-company/country collaboration for collaborative projects, useful infrastructure development in our country. Technical proposal should be submitted by the State Govt. to Asian Development Bank, World Bank, I.M.F. and I.D.A for funding big capital projects for industrial and urban development in Gujarat State Finance Secretary should have liaison with institutions and companies as well as industries, both for short terms and long terms flow of finance.
- [2] For deployment of foreign/global resources the following sectors/areas may be suggested
  - Drinking water and drainage facilities to local self-government for capital projects.
  - Capital goods industry-to buy machinery for heavy industries.
  - Private company sector will have to be encouraged to fund manufacturing activities.
  - Commercial projects should be allowed on 51% and 49% basis of investment criteria.
  - Energy development sector must plan for captive power station machinery.
- [3] The problem would be monitoring the flow of global resources in desired sectors. Develop services for raising resources and identification of correct projects to be funded. Resources, payment of service charges, utilisation of resources having reasonable rate of return to pay back in foreign exchange on requirement for sustainable foreign exchange reserves for development process.
- [4] Suggestions for the IXth five-year plan :
  - [1] Finance secretary of the state government may avail, computerised services on internet about investment availability and route of global resources.
  - [2] Identification of infrastructural projects involving huge foreign exchange resources.
  - [3] Development of import-substitution industries through a complex of state sponsored corporations in Gujarat State.
  - [4] Banks and financial institution should come together for identification and utilisation planning of global resources in Gujarat.

**B.M Jani \***

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\* Reader in Economics, Saurashtra University, Rajkot, 360 005.



### **Objectives**

- [1] Import substitution for commonly and products
- [2] Social Welfare and larger interests of community
- [3] Monitoring of foreign exchange

### **Problems & Recommendations**

- 1. Timely project evaluation — Training to the valuator by an external agency
- 2. Quick board level decision  
Quick decision in management
- 3. Repayment in time — Time planning with scientific calculation
- 4. Politically motivated expenses  
Undertake only viable projects

### **Action Plan**

#### **Short Term [2-3 Years]**

Preparation of viable and high return yielding project reports, ensuring regular inflow of finance

#### **Medium Term [5 Years]**

Time management of projects in line with size of fund

### **Issues**

- [1] How to tap global resources by different department of state government?
- [2] What would be probable impact if foreign exchange resource are not properly utilised?
- [3] Your suggestions about the IXth five-year plan.

### **Recommendations**

- [1] Agriculture, Industry and service sector require global resources as local resources are inadequate for development of activities in sub-sectors of our economy. Infrastructure development corporation and govt. departments shall prepare schemes and projects to utilise foreign exchange resources.
- [2] If resources are not properly managed the Govt. of India & RBI will have to face problem of the repayment in foreign currency Each project should be completed in time with reasonable return to generate resources for external payment. Commercial activities should have adequate rate of return. Technical experts of RBI & private consultancy firms can prepare viable schemes to be funded by global level agencies for the state.

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\* Chief Manager, State Bank of Saurashtra Training Centre, Rajkot 1.

[3] Suggestions for the IXth five-year plan:

- (1) Development of water ways, air-ways and railways.
- (2) Generation of Power by global competitive bids.
- (3) Drinking water facilities through project aid of World Bank
- (4) Development of telecommunication system by a time-bound programme.
- (5) Collaboration with competitive foreign banks to complete infrastructure project on competitive basis.

**B. M Jani \***

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\* Reader in Economics, Saurashtra University, Rajkot 5.

**Interview : 13.5**

**R. V. Mehta\***  
**A. Kumar\*\***

**Objectives**

To make Gujarat economy a world giant through acquisition of global resources viz. capital, management services, technology.

**Background**

Gujarat is pioneer in industrial activities in India. It has good industrial atmosphere. Programs are made to attract global resources viz. foreign direct investment in agriculture, industry and service sectors.

**Problems**

Weak administrative system

**Recommendations**

- [1] Effective programmes to accelerate the growth of sunrise industries
- [2] Open global capital markets in Gujarat
- [3] As per the needs of the industry, programs are to be framed at industry, institutional and state levels.
- [4] Resource exchange program to be framed viz. management exchange program at executive level high-tech transfers be subsidized.
- [5] Remove unnecessary controls and regulations for attracting Foreign Direct Investment.
- [6] Build up a common platform consisting of academicians, industrialists, non-government organizations and minimize political interference.
- [7] Frame up programmes for collaboration of our scientists for developing new technology and new products. Flexibility of syllabi and manpower is to be encouraged.
- [8] Basic administrative support system be revitalized.

**A. D. Saramma \*\*\***

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\* *Professor & Head, Dept. of Physics, Bhavnagar University, Bhavnagar, is a scientist of international reputation. He has visited countries like France, Italy, U.S.S.R., U.K. and Japan for his research in the field of magnetic fluids.*

\*\* *Reader & Head of the Department of Business Administration, Bhavnagar University and a Member of the Board of Directors, Alcock Ashdown - a State owned Unit. His area of specialization is financial management.*

\*\*\* *Reader, Department of Economics, Bhavnagar University, Bhavnagar 3642 002.*

### Objectives

- [1] To raise global resources for speedier development of Gujarat.
- [2] To establish well planned contacts with non-resident Indians-specially Gujarati NRIs, international institutions, foreign governments., foreign companies and financial development institutions etc.
- [3] To attract foreign capital by liberal policy.

### Background

Global resources are available to Gujarat but its quality and quantum are not satisfactory. Resources of NRIs mostly untapped, absence of proper policy, environment and treatment for foreign resources, politicians in power and responsible departments and authorities are indifferent. Situation is little better than in other states.

### Problems & Recommendations

1. Inadequate availability of global resources.  
Make effective contacts and provide for information - facilities etc.
2. Potential global investors are treated efficiently in various terms.  
Establish effective mechanism to overcome this.
3. Receiving and absorbing foreign resource mechanisms are inadequate and unmotivated.  
Establish needed mechanisms and create healthy and efficient environment.

### Action Plan

#### Short Term [2-3 Years]

Approach all potential NRIs, send competent missions, contact foreign companies and investors, assure safe and high returns.

#### Medium Term [5 Years]

Formulate comprehensive policy and programme

#### Long Term [10 Years]

Develop wider political, social, economic relations with citizens, leaders, institutions etc. of foreign countries

Subhashchandra Shankarlal Nayee\*\*

\* Coordinator and organiser of several educational, cultural and national activities.

\*\* Lecturer in Psychology

Interview : 13.7

Manoranjana H. Valshnav\*

### Objectives

- [1] To secure/procure more resources from foreign countries for Gujarat
- [2] To establish contacts with all potential sources.
- [3] To establish machinery to get global resources in Gujarat.

### Background

Gujarat receives global resources but potential remains largely untapped, comprehensive planning and mechanisms-machinery needed. The Scope is large, Govt. and social will is needed.

### Problems & Recommendations

1. Will to avail global resources is absent.  
Generate, develop the will — use media.
2. (a) Planning absent, (b) machinery/mechanisms are absent.  
Set up competent department in Gujarat Government plus effective efforts by business community and the press etc.
3. A few, scattered and adhoc efforts only.  
Provide political and social leadership.

### Action Plan

#### Short Term [2-3 Years]

Prepare information scientifically-contact NRIs

#### Medium Term [5 Years]

(a) Get extensive and accurate data of global resources (b) Establish result-oriented machinery etc.

Sangita Ghanshyambhai Tarpara\*\*

\* Retired Professor of English

\*\* Lecturer in Economics

Interview : 13.8

Prem Kumar Nandlal Sharda\*

### Problems & Recommendations

1. Infrastructure  
Full fledged airport and shipyard
2. Financial facility  
Foreign bank-branched can be established. Foreign Exchange Dept. of commercial banks to be strengthened.
3. Meeting International standards for our domestic product , only then global link is possible.  
Quality testing centre. private but Government approved, must be established.

### Action Plan

#### Short Term [2-3 Years]

Internet, TV Centre. Surat must have Internet facility

#### Medium Term [5 Years]

Quality testing centres establishment of banks with foreign exchange department.

#### Long Term [10 Years]

Development of airport and Magdalla port.

Subadra Ragothaman \*\*

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\* Southern Gujarat Chamber of Commerce, Makaipool, Surat. B.Sc. M.B.A. He is an Industrialist connected with textiles. He is elected President of the southern Gujarat Chamber of Commerce & Industry; Vice-president of Pandesara Weaver's Co-op. Society; also visiting faculty in Department of Business Management of South Gujarat University.

\*\* Lecturer in Economics, Department of Economics, South Gujarat University, Surat.

*Interview : 13.9*

**Y.B. Desai \***

**Problems**

1. Infrastructure facilities inadequate
2. Quality of products need to be improved
3. Foreign Exchange Dept. of Banks to be strengthened.

**Recommendations**

Airport, Shipyard need to be improved.

ISO standard to be implemented.

**Action Plan**

**Short Term [2-3 Years]**

Influence Telecommunication Dept. for internet facility

**Medium Term [5 Years]**

Stock Exchange, information base of flow of funds should be strengthened.

**Long Term [10 Years]**

Air strip, five star hotel, Magdalla Port development

**Subadra Ragothaman \*\***

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\* *Practicing Chartered Accountant since 1967. He is a member of Southern Gujarat Chamber of Commerce. He is at present President of this Organisation. He is also associated with productivity Council of the city.*

\*\* *Lecturer, Department of Economics, South Gujarat University, Surat.*

## GROUP 14. EMPLOYMENT

### (i) EXPERTS

Mr. D.A. Anandpura  
Prof. B B Patel  
Prof. S S Mehta

### (ii) RESOURCE PERSONS

Mr. Ashok Narayan  
Dr. P K Das  
Mr. Kirit Shelat

### OBJECTIVES:

Full employment by 2002.

### PROBLEM

Inadequate technical manpower  
in non-agricultural workforce

Conventional approaches  
inadequate

Focus areas:

### RECOMMENDATIONS

Add technically qualified manpower 75% being ITI (or equiv.) certificate holders

Increase employment potential in agriculture and non-conventional sectors.

1. Water-shed Management: Increase investment in water-shed management; create irrigation facilities by major/medium and minor irrigation projects.
2. Increase investment in Animal Husbandry, Forestry, and Logging and Fishing.
3. Promote Agri-tech institutes to support modernisation & diversification of agriculture and allied activities and train 1% of agricultural work force.
4. Set up Institute for training in Port and Marine related activities.
5. Set up Institute to train security personnel.
6. Promote self-employment in different sectors.

Give necessary inputs like training, credit, premises and marketing linkages. Develop innovative State initiatives.

Need precise skill-demand estimates

1. Region-wise skill demand survey.
2. Individual industry questionnaire.

Rural tribals need job opportunities

Allocate financial resources for vocational training through voluntary organisations in rural areas.

Education pattern inappropriate

Change pattern of vocational education at 10+2 level.

Interventions in Labor market

Set up Center for Monitoring Labour Market.



## XIV. EMPLOYMENT IN GUJARAT

A.J. Vora\*\*  
V.R. Raval\*\*

The following are the issues and recommendations:

- 1 The relation and linkages between Industry and society in general and academic institutions (College, University, etc.) in particular should be strengthened. Interaction and dialogue between the two should be on regular basis. The demand for technical persons across space and sectors (industry trade) should be surveyed. The educational planning and training facilities be created accordingly. The level of training should be improved.
- 2 Universal literacy is a must. The child labour should be prevented. Children should be in the school.
- 3 English is neglected in Gujarat. English is a language of commerce and business. Working knowledge of English is the need of industry and business. Educational planning be made accordingly.
- 4 Computer education should be introduced at the school level. Industries should donate their old, and outdated computers to schools.
- 5 Industries should create in house facilities for generating and developing required skills and should not entirely depend upon polytechnic/I. T. I. for such requirements.
- 6 Unlike industry and commerce, rural areas in general and agriculture in particular do not need the knowledge of english. It needs science and technology. Educational Planning for rural areas should be such that it fulfills its needs. Agro-techno institutional network in rural areas is recommended.
- 7 Homogeneous area can be identified. Gujarat can be broadly divided into three specific areas namely: (1) Western places, Coastal Area, (2) Eastern Hilly and Forest Area, and (3) Plain. Specific planning is recommended for each area. Need based and resource based planning, in the place of target based planning, is necessary.
- 8 Marketing is a weak chain. Producers in rural areas are exploited by traders. Agriculture Produce Marketing Cooperatives are not protecting producers from traders' exploitation APMC be reorganized. NGOs be involved in market functioning.
- 9 As in watershed programme, NGOs be involved in irrigation and Jivan Dhara.
- 10 The employment generating activities such as irrigation, water shed, floriculture, horticulture, diamond cutting and dairying should be given priority. Financial and marketing support is recommended. NGOs should be involved.
- 11 Forest based industry is recommended for hilly & forest areas. Mahuda and medicinal plants be given priority. Instead of pucca dams, kachcha dams are recommended in these areas.

\* Report of the District level meeting held on 4-10-1997 at Valsad

The list of participants is given in Appendix-I

\*\* Vanraj Arts and Commerce College, Valsad.

- 12 In coastal areas there is a scope for employment generation in various fields, such as coconut plantation and sopari tree, fishery - Zingas, minerals & chemicals, salt, soda ash, caustic soda, shark liver oil, mangroves, processing and preserving of marine products, electricity generation, protein foods etc.
- 13 Traditional methods of fish preservation are outdated. Modern methods therefore should be introduced.
- 14 Cross breeding of Deshi/Country cows is recommended.
- 15 The importance of Amabar-Charka, Handlooms and Khadi Vastra Udyog is emphasised. Subsidy is needed, but it should not be given undue importance, instead, K & V industry should be made competitive and self supporting.
- 16 Industries should be encouraged to go to rural and interior areas. They should be given subsidy in taxation. At the same time these industries should be linked with employment generation and not with capital, as they are presently linked.
- 17 Infrastructure facilities must be developed in rural and interior areas to attract industries.
- 18 The role of information technology and networking is emphasised. Disaggregated data at administrative level should be created and made available.
- 19 Private transportation services should be allowed to transport labourers from their home to place of work.
- 20 Consumer's approach in government machinery and integrated approach in employment generation are recommended.
- 21 TRYSEM and PMRY should be reorganised. Banks reject most of the applications of loan from such trainees. Many trainees do not get loan. Training is treated as wage employment and stipend as wages. It is recommended that training should be imparted by polytechnics and ITI. Identification of beneficiaries is important. NGOs should be involved. There must be an advisory/loan sanctioning committee in every bank and its branches. Selection of beneficiaries should also be done by the committee. NGOs should be involved in both the committees.
- 22 Professional approach to employment planning would obviate the need for subsidies and/or rebates.
- 23 The certificate of Talati should be considered sufficient for loan. Moreover head of the family also should give consent for the loan.
- 24 Unorganised labour should be organised. Child labour should be totally banned. Contract system of labour should not be allowed. Labour laws should be implemented. Job security and social security should be provided to workers.
- 25 Power supply is a problem. If more electricity is generated and fully utilized it can generate employment and increase production.
- 26 District Planning Board should be reorganised. Besides experts, Government executives and elected representatives, social workers and NGOs should be included in the reconstituted District Planning Boards.
- 27 While monitoring or implementing the planning, social workers, peoples' representative and NGOs should be included at every stage, right from village to district level.
- 28 Administration should be decentralised. The centralisation leads to bureaucratisation, redtapism, delays, and corruption.

## 14. EMPLOYMENT

V. N. Kothari\*

### Objectives

The plan should aim at creation of more employment by better utilization of scare resources available in the economy. In the rural areas the problem is more of under-employment and should be tackled through emphasis on growth of subsidiary activities. In urban areas open unemployment has to be tackled through self employment schemes. Urban informal sector growth needs to be monitored.

### Background

The formal sector can not absorb the growing labour force in the economy. The emphasis on industrialization is valid from the economic development point of view. The past experience shows that the creation of employment in the economy can be achieved only through higher growth of agriculture and allied activities and growth of informal sector.

### Problems

1. Depletion of local assets and common property resources in rural areas.
2. Almost all districts of Gujarat are drought prone. Contingency plans do not exist to tackle the crisis situations.
3. Rehabilitation of textile workers needs more state attention.
4. Employability is linked to education and not to the skill levels of labour.
5. Salinity of the coastal areas is increasing.
6. Development of rural areas needs greater emphasis.
7. Urban unorganized sector needs greater monitoring.
8. Education levels are low.

### Solution

1. Rehabilitation of local assets and common property resources can be done with low investments. This can help better use of common local resources. This will give rise to earnings in a substantial way for the rural people. This programme can be started in large villages and in due course can be extended to smaller villages. Works such as (a) common property resources, (b) plantation and preservation of trees can be taken up.
2. Crisis management needs to be improved. All districts should have contingency plans prepared well in advance to meet the crisis such as drought. Preparing plans in the crisis situation will be a short-sighted approach.
3. Workers of closed textile units need further support. This can be done by liquidating the assets of closed units. Abolition of Urban Land Ceiling Act can be of great help in this regard.

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\* Former Head, Economics Department, M.S. University. He worked extensively in the areas of education and human resource development. He was a member of various state government committees and also a member of UGC panel on social sciences.

4. Emphasis on skill development; both in rural and urban areas. Marketable skills of labour need to be enhanced. Emphasis should be laid on short term courses such as in Urban Areas: (a) upgrade working knowledge in english, (b) computer training, and (c) mechanical skills.
5. Reclamation of waste land can lead to better use of available scare natural resource and at the same time will improve employability and income of the people in the areas concerned.
6. Development should be based on local requirements. Local bodies such as panchayats should be involved in the planning process.
7. More credit to the urban unorganized sector. Involvement of Non Governmental Organisations. Legal status to be provided to this sector. Industrial shops to be set up in urban centers. Tiny industrial service estates need to be set up.
8. Universal school education to be emphasized.

**A.S. Rao\***

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\* *Dept. of Economics, M.S. University, Baroda.*

Interview 14.2

Vipinchandra R. Patel\*

**Objectives**

The plan should aim at achieving higher growth of the agriculture sector. Allied agriculture activities need to be given greater importance in the planning process. More training programmes for different sections of labour both in agriculture and industrial sectors need to be organised to improve their productivity. Training of labour in the informal markets should also be taken up. Emphasis should be on skill formation at all levels.

**Background**

The planning for employment in India is based on the false assumption that industrialization will generate more employment and will lead to attaining the target of zero unemployment. With the given growth of labour force in the economy and slow absorption of labour in organized industry, agriculture and allied activities, and urban informal sector face the pressure.

**Problems**

1. Low literacy and skill levels of labour in the agriculture sector.
2. Lack of awareness of responsibilities by the industrial labour.
3. Lack of work culture and responsibility among government sector employees.
4. Fallacy of theory that industry will generate high employment and thus solve the unemployment problem.
5. Trade union leaders acting in collusion with management of the companies.
6. Pricing of agriculture products is improper.
7. Implementation of labour laws ineffective.
8. Minimum Wages Act, not implemented properly.

**Solutions**

1. Special skills to be imparted to the agricultural labour and also increase their literacy level.
2. Emphasis on special training to the industrial labour by voluntary organizations. Workers are to be made aware of their rights as well as responsibilities.
3. Reduction in the protection-levels to the employees in the government sector.
4. Emphasize the growth of agriculture and allied activities. This can reduce pressure on urban areas and the industrial sector.
5. The activities of trade unions should be monitored. More of collective decision making to be introduced.
6. Policy of cost plus pricing to be followed.
7. Labour laws should be implemented strictly on all profit making firms and firms above five years of age.
9. Government is not in a position to implement Minimum Wages Act in the informal sector, specially in the agriculture sector. This act is only breeding corruption in small scale units. This needs to be amended.

A.S. Rao\*\*

\* Secretary, Majour Mahajan Mandal, Vinobabhava Marg, Salatwada, Vadodara - 390 001.  
Mr. Patel is labour leader. He is associated with Baroda Productivity Council, Vadodara Jilla Khedut Samaj, The Baroda Central Co-operative Bank Ltd., and Shramik Vidhyapith, Baroda.

\*\* Dept. of Economics, M.S. University, Baroda.

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Interview 14.3

Saralaben Trivedi\*

**Objectives**

Employment for the unemployed young graduates, and technically skilled workers in the industry. Increase in self-employment opportunities.

**Background**

System as it is cannot create adequate employment in the formal and informal sectors in rural and urban areas.

**Problems**

Agriculture cannot absorb any more labour force.

Lack of bankable projects for employment generation.

Informal sector employment given to irregularities and exploitation of workers.

**Recommendations**

Training for the rural manpower. Development of trade and manufacturing activities. Development of formal and informal sectors. Child and women education.

**Action Plan**

**1. Short term (2-3 years)**

Development of work opportunities to rural and urban manpower.

**2. Medium term (5 years)**

Sectorial planning for employment

**3. Long term (10 years)**

Perspective employment plan for rural and urban areas in Gujarat.

**Issues**

1. What is a nature of unemployment in Saurashtra ?
2. How do you plan to manage demand and supply of employment?
3. Which kind of sectoral planning is necessary for creating more employment.
4. Do you agree that privatisation can increase unemployment in Gujarat?
5. What kind of actions are necessary to tackle employment fluctuation in unorganized and informal sectors?

**Recommendations**

We have unemployment due to seasonal factors and power cuts in the industrial sector. Agro-based industries can absorb more workers.

B. M. Jani\*\*

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\* Employment Exchange Officer, Rajkot-1.

\*\* Reader in Economics, Saurashtra University, Rajkot-5.

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**Interview 14.4**

**J. Majmudar\***

**Objectives**

Generation of gainful employment through proper resource allocation.

**Problems**

1. Self employment assistance is not sufficient
2. Leakage and procedural problems in employment generation.
3. Private sector uses highly capital intensive technology.

**Recommendations**

1. Study of the past schemes before implementation of new schemes.
2. Clear demarcation of Small Scale Units to assess their employment generation potential.
3. Transparency in Government investment and resources allocation procedures.

**Kishore M. Joshi\*\***

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\* Placement Officer, Faculty of Management, Bhavnagar University.

\*\* Lecturer, Deptt. of Economics, Bhavnagar University, Bhavnagar.

Interview 14.5

Jashwantray G. Kanabar\*

**Objectives**

To create at a rapid pace substantial opportunities for productive employment. To reduce unemployment, under employment etc.

To reduce and remove rural and urban poverty by providing gainful employment and work opportunities to all poor.

To devise new wage and self-employment programmes throughout Gujarat.

**Background**

Lakhs of young educated people, and uneducated males and females in rural and urban areas are without work and earning opportunities and therefore suffer from deprivation, poverty, loss of dignity and quality of life with serious implications - political, economic and social.

**Problems**

Size of unemployment, and under-employment is very large.

This results into large incidence of poverty - rural and urban.

Need for effective implementation and formulation of more employment generating programmes.

**Recommendations**

To implement present programmes effectively, it is necessary to act now.

Reorganize poverty eradication programmes for rural and urban areas.

Identify gaps in programmes to be filled up by effective co-ordination, monitoring etc.

**Action Plan**

**1. Short term [2-3 yr.]**

Make district-wise targets for employment creation. Train youth for self-employment on a larger scale.

**2. Medium term [5 years]**

Help establishment of thousands of units of small and cottage industries, and make taluka-wise plans for implementation.

**3. Long term [10 years]**

(a) Ensure "Right to work" as a fundamental right to all citizens by amending constitution, (b) remove corruption and waste so that funds are released for employment generation, (c) target for a higher rate of growth for all sectors of the economy.

Sangita Ghanshyambhai Tarpara\*\*

\* Leading senior advocate and founder of social and religious movement "SWADHYAY PARIVAR" in Amreli district. Free legal advice to various social organisations.

\*\* Lecturer in Economics.



**Interview 14.6**

**Vasantbhai Sanghavi\***

**Objectives**

- To achieve full employment in the state by 2006-2007
- To realize high quality of employment in terms of incomes, work environment etc.
- To raise rate of growth of state economy to 8-9% per year.

**Background**

- (a) Employment creation is slow, organized industry not contributing enough to generation of employment, (b) unemployment incidence quite high

**Problems**

- (a) High rate of unemployment,
- (b) quality of employment partly poor.
- (c) Priority to employment generation not actually accorded
- (d) Organizational etc. deficiencies / obstacles exist.

**Recommendation**

- (a) Give high priority to employment; fix clear targets.
- (b) Decentralize employment generating programmes.
- (c) Encourage and increase training for self-employment, remove the obstacles, and monitor targets / programmes.

**Plan**

**1. Short term [2-3 yr.]**

Taluka-wise employment target to be fixed and achieved, local bodies plus banks to be involved in process.

**2. Medium term [5 yr.]**

Speed up irrigation, recharging of wells, broadening, and deepening of dams, tanks etc.

**3. Long term [10 years]**

Compel big firms to start small units for employment creation / to adopt villages for employment creation.

**Resources needed**

Business, industries, organisations, big labour unions, professional bodies, and voluntary agencies be persuaded to contribute.

**Sangita Ghanshyambhai Tarpara\*\***

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\* *Social worker.*

\* *Lecturer in Economics.*

Interview 14.7

Rohinton Sukhadia\*

The problems and solutions are listed below :

- The industrialist should be required to prepare "employment budget" at the time of granting industrial licence. This would assure of survival of employment (workers) in the industry.
- The local workers should be given priority in the industry.
- The industries should be enabled for continuous modernisation to keep pace with the new challenges.
- The industries should be required compulsorily some allocation out of their total turnover for social responsibilities.

Government should get assurance from the industrialists for "Special Job Training Programme" for their workers.

- The overtime system should be regulated to extend employment opportunities to unemployed.
2. The employment exchange offices do only the registration of educationally qualified unemployed candidates. They are not helpful to job seekers.
    - The employment offices should be well furnished.
    - All the degree holders as well as educated people should be registered compulsorily at the exchange offices.
    - All the recruitments should be allowed only through the employment exchange offices.
    - The candidates already trained under Apprentice Act should be given preference for appointment in industries.
    - The employment offices should also maintain the register / list of jobless workers at district level.
  3. Industrial Training Institutions mainly emphasize theoretical knowledge.
    - Institutions should give more importance to the practical and laboratory work to enable students for self-employment.
  4. In Gujarat the attitude of candidates towards defence services is totally unsatisfactory.
    - More defence training centres should be opened (particularly in tribal areas).
    - Information centres on defence should be arranged to remove doubts regarding undue fears or risk factors connected with the defence services.
  5. The problem of urbanisation can be solved through the establishment of rural industries. Today loans and subsidies for rural industries are largely wasted.
    - The management of rural industries should be vested with panchayats. The inefficient officers of the panchayats should be strictly handled.
    - There should be arrangement for education and training suitable for rural industries.
    - The primary co-operative societies of workers should be established.

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\* Manager, Valsad-Dang Gramin Bank, Chikli

6. The Jawahar Rojgar Yojna has led to corruption in village panchayats. All the projects implemented under this scheme are mostly election oriented. They do not raise employment.
  - Such type of schemes should be vested with Jilla Panchayats.
  - The district panchayats should conduct survey of various villages in the district and should prepare priority list for execution under this scheme.
  - The projects to be carried out under this scheme should aim at increasing incomes of the people.
  - The accounts of works should be inspected and audited regularly.
7. In Gujarat we do not have service centres in the GIDC estates.
  - There should be an association in the GIDC estates which should recruit expert officers of different fields.
8. Most of the small scale industries in the state are facing financial crisis as well as depressed markets.
  - The surplus of unemployed force resulting from the closing of sick units should be absorbed by the expansion of sound projects. Such units should be financially assisted by the government.
  - The problem of depression in diamond industries can be moderated. Here the import of raw material and export of finished goods should be encouraged.
  - The employers in Diamond units creating unemployment by closing their projects should be charged with penal actions.

**V.D. Patel\***

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\* Lecturer, Vanraj Arts & Commerce College, Dharampur.

## Interview 14.8

R. D. Patel\*

The problems and solutions are listed below

1. As various units / institutions in the organised sector have constituted their recruitment boards, the employment exchange offices have remained as registration offices only.
  - All the states in our country should maintain the list of candidates according to the required educational qualification for different types of jobs and the list should be modified periodically.
  - All the recruitment boards should insist only on list of registered candidates from employment exchange offices for different types of recruitments.
2. In the unorganised sector the employers are required compulsorily to register their total requirement of employees at concerned employment exchange offices. But for their recruitments, the registered candidates with employment exchange are neglected.
  - The employment exchange offices should organize "Spot Selection Camps" by setting better link with private sector employers.
  - The employment exchange offices should be provided with necessary vehicles to make compact projections of "Spot Selection Camps".
3. It has been noticed that most of the public policies, programmes instruments / resources and laws are made for the development of organised sector only. We have some policy actions for un-organised sector which are more a part of welfare and poverty prevention programmes. They are not helping the target beneficiaries. The following steps are suggested for the development of self-employment sector. Training in the modern technology is necessary.
  - Timely release of information about latest movement of market.
  - Legal as well as investment guideline should be made easily available.
  - The beneficiary should be assured with timely and adequate loan facility.
  - Different types of risks should be covered under insurance.
  - Different institutions engaged in the business of self-employment should maintain better mutual co-ordination.
  - The woman societies should bring media vigilance to assure their greater contribution at different levels.
  - Schools and colleges should arrange for vacation classes regularly. They should be provided with career making guidelines.
  - In all states "Guidance camps" should be projected at the state level.
  - The bank manager should be given more powers for sanctioning loans to priority sector.
4. The government's allocation for the development of rural industries in backward areas have not led to any benefits.
  - Large per cent of the total financial allocation for different schemes under rural industries should be spent on education, training and guidelines etc.
5. The syllabus of agricultural schools should be restructured to enable good students to get job offers through various competitive examinations.
6. The problem of child-labour in carpet industries in forest areas is quite complicated.
  - In carpet industry employment should be given to the unemployed grown up people, rather than children.

V.D. Patel\*\*

\* Dist. Employment Exchange, Multi storied Bldg., Valsad. Employment Officer (Gen.)

\*\* Lecturer, Vanraj Arts & Commerce College, Dharampur.

### Problems

Bureaucratic Controls over decision making.

Shortage of trained staff.

Shortage of lucrative trades on account of problems in implementing the upgraded syllabus.

Optimum utilisation of the ITIs.

Problem of educated unemployed, lack of manpower planning.

### Recommendations

There is a need for consultative bureaucracy vis a vis ITI network. Many times just because of some bureaucratic controls, genuine demands like the recruitment of the staff are not met with. This has a negative effect on the efficient functioning of the ITIs. This needs a through review.

Most of the private ITIs face immense problems in implementing training programmes for new trades because of lack of finances and administrative hurdles.

To overcome the shortage of staff it is necessary to create a pool of recruitees who could be sent to the institutions as and when required.

There is a need to review existing infrastructure for the different trades at the ITIs. Accordingly, the necessary upgradation of various trades may be taken up. This shall save lot of financial resources that could be spent on the new ITIs. Moreover, this shall also ensure optimum utilisation of the existing network of ITIs.

A training network for the existing staff at the ITIs should be established, or facilities should be created for sponsoring them to institutions having training facilities.

There is a need for detailed survey of manpower needs in different sectors of the economy. Accordingly the syllabus and the nature of the institutions can be planned.

S. Srinivasa Rao\*\*

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\* Principal, Industrial Training Institute, Kamrej, Surat.

\*\* Lecturer, Department of Economics, South Gujarat University, Surat.

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**Interview 14.10**

**Ashokbhai R. Garde\***

- (a) Open economy and de-licensed system,
- (b) Let entrepreneurs decide themselves, the type of skill they require
- (c) Vocational training to be given to workers by the industrialist and cost may be shared between the individual and the industry or industry itself
- (d) On the job training.
- (e) Agro-based industries may be encouraged. That will give incentive to grow-more-farm products and the farm worker may be trained by farmers' association.

**B. C. Thaker\*\***

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\* *Former Director, ATIRA, Ahmedabad.*

\*\* *Sardar Patel Institute of Economic & Social Research, Ahmedabad.*

**Interview 14.11**

**Babu Thomas\***

- (i) Absorb first the existing ITI trained persons - improve communication and language.
- (ii) Increase employment potential in agriculture and non-conventional sectors.
- (iii) (a) Region-wise skill demand differs.  
(b) Questionnaire may be prepared - for floor level supervisions.
- (iv) Dairy industry at rural level may be encouraged - animal husbandry can give them income opportunity in their region itself.
- (v) Restructure the whole system of vocational education as well as primary & secondary education - discard the old system - reasonable payment to the teachers so that they do not run after part-time jobs.

**B. C. Thaker \*\***

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\* *Manager, Gujarat Ambuja Groups of Industries (H.R.D.).*

\*\* *Sardar Patel Institute of Economic & Social Research, Ahmedabad.*

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Interview 14.12

**D.M. Thakor\***

- (i) More qualified people are available for smaller jobs - encourage entrepreneurship.
- (ii) Increase employment potential in agriculture & non-conventional sectors.
- (iii) As a result of globalisation, needs keep on changing Employees should be ready to acquire new knowledge, and adopt new skills.
- (iv) Self-sufficiency at the village level - crop technology should be taught to the farmers in a simple way.
- (v) Education system should be productive - job oriented education - aptitude and education should be matched. Locally available resources should be utilised for their development. Infrastructure to be provided by government finance.
- (vi) State institute is not needed recruiting agency exists.

**B.C. Thaker\*\***

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\* Personnel Manager, Ahmedabad Electricity Co.Ltd, Ahmedabad.

\*\* Sardar Patel Institute of Economic & Social Research, Ahmedabad.



## GROUP 15. POVERTY ALLEVIATION

**(i) EXPERTS**

Miss Amrapaliben Merchant  
Mr. Vikas Satwalekar

**(ii) RESOURCE PERSONS**

Mr. K V Bhanujan, Prin. Secy. HD  
Mr. A W P David, ACS, (Rural Dev) AC&RDD

**OBJECTIVES:**

Cover all families below poverty line by 2005  
No citizen of the state shall die of starvation.

**PROBLEM**

Massive poverty

Destitute & homeless starve  
No family insurance

**RECOMMENDATIONS**

Employment and income generation  
Higher growth rate; safety net Public  
Distribution System only for the poor.

Revamped ANTYODAYA Scheme  
State sponsored family insurance  
schemes.

## **XV. POVERTY ALLEVIATION**

**Sudarshan Iyengar\*\***

### **I. ANTI-POVERTY PROGRAMMES**

#### **Problems**

1. Identification of Integrated Rural Development Programme beneficiaries is not satisfactory.
  - (a) Eligible households are left out and ineligible households are included in the District Rural Development Agency list.
  - (b) The below poverty line (BPL) list is not updated every year. There is no system by which those who cross line are removed from the list and those who may have slipped in poverty are included. Five years is a long period to update the list.
  - (c) The list of Below Poverty Line households prepared on the basis of the survey is never displayed on the notice board or any such place where it can catch attention of all villagers.
  - (d) Gram Sabha is not held for scrutinising and finalising the list of the poor.
2. The income limit of Rs.11,000 per household per annum is not adequate for all those households who have large family size, i.e. more than five members.
3. The rate of inflation has been very high. Participants felt that Rs.11,000 may not help in meeting barest minimum needs of the family.
4. The unit cost fixed by National Bank of Rural Development for certain schemes is totally unrealistic. For instance, in Banaskantha and Mehsana districts which are well-known for Kankrej variety of cattle and Mehsani buffalo, the minimum price per unit of milch animal is more than rupees 15 to 20 thousand. The National Bank of Rural Development limit is Rs.10,000. Obviously, in most Intensive Rural Development Programme cases, the milch animals that get selected are of inferior quality and yield less milk. The financial viability is thus jeopardised right from the very beginning. It is no surprise that the Intensive Rural Development Programme milch animals have higher casualty rates and the cases of overdue are high.

#### **Recommendations**

1. Voluntary agencies should necessarily be involved in the Below Poverty Line survey whenever they are conducted. If agreed upon by the voluntary agencies, the survey work should be given to them.
2. The draft list of the Below Poverty Line households should compulsorily be displayed in an appropriate place in the village and it should be publicised sufficiently to draw attention of the village residents. The voluntary agencies should also be involved in the process.

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\* Report of the District level meeting held on 19-4-1997 at Banaskantha  
List of participants is given in Appendix-I

\*\* Professor, Gujarat Institute of Development Research, Ahmedabad.

3. Gram Sabha must be convened and no list should be finalised without the approval of the Gram Sabha. Some senior government functionaries and some voluntary agency workers must be deputed for the Gram Sabha. Before the time of the meeting, the villagers should be informed by making repeated public announcements.
4. Even after all the above procedures, if some names are left out or if some ineligible names find place in the Below Poverty Line list, people in the village and workers of the voluntary agencies should be allowed to make representations to the Taluka Development Officer and the Officer should take remedial actions.
5. Some method should be devised to update the list so that all those who cross the poverty line are taken out and those who have become poorer are listed.
6. Criteria other than the income of the family should be devised and used to identify the below poverty line family. One way should be to conduct Participatory Rural Appraisal (PRA) in each village and try to do income and wealth ranking. The survey data may then be used to verify the Participatory Rural Appraisal findings. Generally, people in the neighbourhoods in the villages are aware about the economic status of one another and should be able to tell whether a particular household is able to meet the basic minimum needs for all the twelve months or not.
7. The unit cost fixed by National Bank of Rural Development for certain schemes covered under the Intensive Rural Development Programme should be reviewed and revised upwardly in the light of the market prices of economic assets. This is an extremely important step to ensure the financial viability of the IRDP schemes.

## **II TRIBAL AREAS**

### **Problems**

1. Land which is a main source of production is of inferior quality in most places.
2. Much of the land which is regularly cultivated is not necessarily owned by the cultivating tribal persons. Since these land parcels are deforested, denuded and degraded forest lands, their productivity is also low. More importantly, the forest department claims ownership and hence treats all the regular cultivators as encroachers. Part of the meager output produced from these land parcels by the poor tribal people has to pay either as fine or as a bribe to the forest guards and higher functionaries of the forest department.
3. The tribal belt is closer to the border state Rajasthan and the topography is undulating. Most villages are inaccessible. Interestingly, this problem was highlighted forcefully also by the Tribal Sub Plan functionaries. They said that even if they were willing to help the tribals they were not able to do so because they couldn't reach most of the villages.
4. The level of literacy and education has been abysmally low among tribal people. They are in the group of ill-founded customs, traditions and habit of drinking. Males mostly drink and do not generally work whereas women do most of the work and earn bread for the family.
5. Some centrally sponsored schemes are being implemented in the area of education and social welfare. However, the central government departments are very casual and callous in their approach and they create problems in releasing the grants regularly. The implementing agency has to go to Delhi for follow up. Not all agencies have the wherewithal and ability to go to Delhi to pursue the release of grants.

6. The 1980 Forest Conservation Act was reportedly one of the main villains coming in way of the development of the tribal people in the area. Even the development departments are not able to undertake schemes because of the Act let alone traditional rights and privilege of the tribals on the forest produce.
7. The tribal belt in Banaskantha also faces severe drinking water crisis.

### **Recommendations**

1. It was suggested that whatever land areas have been under cultivation for years should be released and the ownership titles should be given to the farmers.
2. On the released land the government departments should come forward with schemes for improving the land productivity both in agriculture and in agroforestry.
3. The Forest Conservation Act 1980 should be reviewed in case of each district and block to assess whether the areas deserved to be called as forest areas. If necessary, some areas should be denotified. Further, even in the notified areas, the traditional rights of the original settlers i.e. the tribals must be restored. This move should ensure the tribal's participation in the preservation, conservation and development of the forest areas.
4. Roads, public buildings, drinking water facility and other physical infrastructure should be laid on a priority basis.
5. The voluntary organisations should be supported to expand the education facility in the region. Literacy drive should also work for eradicating harmful traditional customs and practices among the tribal communities.
6. The schemes under the government development programmes must be redesigned keeping in view the area and population specific needs.

### **III PLAIN AREAS**

#### **Problems**

1. The main problem is of generating enough employment. Agriculture which is the mainstay of the population is not able to support the workers all through the year. There aren't any non-agricultural activities because the secondary and tertiary sectors' base is very poor. Agriculture is also poor because the irrigation facility is limited.
2. Efforts to set up and run Khadi and Village Industries have suffered a serious set back because of the insufficient market. The competition from other normal units is severe. For instance Nutan Bharati, MadanaGadh experimented with the processing and production of spices but was competed out by other producers because most of them pushed inferior product with lower prices.
3. The plain areas in Banaskantha district also have vast land areas in villages that are not under cultivation. They are mostly waste lands. Parts of them are vested with gram panchayats in the form of Gauchars. However, it was reported that encroachment is on a large scale. People have encroached for private cultivation and other uses. It is not possible therefore to use these land parcels for productive public use.
4. People in general and women in particular are very good in arts and crafts. However, the traditional arts and crafts are dying because of lack of adequate and proper encouragement and market support. The embroidery and leather craft is dying very fast.

### Recommendations

1. Irrigation facility should be expanded as fast as possible. The National Bank of Rural Development's restriction which covers the area in blanket fashion, should offer scope for discretion and wherever water is struck permission for bores must be granted to support better irrigation.
2. The government may think of introducing short term subsidies for village industries products and help in creating markets in the rural and urban areas. The government may think of providing some incentive to those individuals and institutions which support the village industry products. However, it was realised by all that in the long run the village industry will have to compete in the normal market on the strength of quality and price. The village industries will have to gain expertise in creating market for its products. In the initial phase the government may think of subsidising some of the products produced by the village poor.
3. Employment opportunities may be increased by planning a more productive use of common waste lands that are encroached. The encroachers have to be persuaded either by incentive or by punishment so that the lands are released and put for common use. The submersible pump cooperative in Palanpur has conducted a successful experiment in 25 acres of land. This land was released from encroachment and the cooperative made investment for fodder production. An investment of Rs.200 was made for producing grass and grass output worth Rs.3200 was produced in a year. This was distributed to the landless poor and widows who had milch animals in the villages. It was suggested that learning from this model, all waste land in the district needs to be released and then to be put to use for socially beneficial production. If the net social benefit of putting the common land for public use is higher than its use by private individuals through encroachment, the public use must be supported and encouraged.
4. The arts and crafts with the people need to be revived, revitalised and strengthened. Some voluntary agencies have made successful attempts. The government may draw lessons and support such ventures.

### IV. DESERT AREAS

#### Problems

1. The most serious problem in the desert area is drinking water. Women have to spend hours to collect water from small pot holes dug in the river bed.
2. Economic activities are extremely limited. Men tend to migrate in search of work and also with animals in search of pastures.
3. Cattle-rearing is a traditional activity but it has suffered because of water scarcity.
4. Arts and crafts among the women is a tradition. However, they don't get time to pursue it because most of their time is spent in collecting drinking water.

#### Recommendations

1. Rain water conservation is perhaps the only viable solution to solve the drinking water problem until the Sardar Sarovar Project canals bring Narmada water. The recent experience in undertaking the watershed development by Government of India has been very encouraging. Some of the rain water harvesting structures that have been built in villages in Vav taluka by the Sarvodaya Kendra, Amirgadh have not only solved the drinking water problem but have also provided water for irrigation. During the last agricultural year, the farmers in these villages were able to produce Jira worth several lakhs of rupees. It was suggested that the watershed programme

in the desert region would be the solution for alleviating the people from poverty. It was stated that the out migration from the villages where the watershed work had been carried out has reduced substantially.

2. Closely monitored fund to support the animal husbandry and cattle rearing would be another scheme which needs to be strengthened in the area. Voluntary organisations having commitment and professional approach should be supported to undertake the programme.
3. The afforestation work is necessary but it should not be done departmentally because the forest department is not doing it efficiently. Instead, if people can be involved with proper incentives, it will not generate enough employment but it will also lead to quality work. The money spent under the Desert Development Programme (DDP) was more than 50 crores in 1991-92, but the results are not commensurate. The Desert Development Programme should also involve people and voluntary organisations right from the stage of planning.
4. Under the Border Area Development Programme the road network is well-laid. The communication links therefore have improved considerably. This work should continue.

## **AN OVERVIEW**

Although there are some area-specific problems which influence the nature and extent of poverty in Banaskantha district, people's perception about solutions has also a bearing on the solutions for the most other regions in Gujarat.

Poverty in Gujarat is found in some pockets and among certain segments of population. Tribal areas are backward and people there are poor. There are problems relating to the communities' ability to accept more scientific and rational values, accept modern education and literacy programmes, but the major problem which has kept them poor relates to the control over the productive resources in the region. This concern was voiced by the voluntary organisations in the workshop. The land use in the forest areas calls for a serious review. The stakes of the tribal population on forest land and forest produce including timber have to be created keeping in view the correct environmental perspective and concerns.

Identification of poor still continues to be a problem. Village communities and voluntary organisations are not still involved to the extent to which they should be. Unless, communities and locally knowledgeable people help, the government, officials won't be able to make correct identification which is the key to the success and usefulness of the household-based anti poverty programmes.

Schemes for the poor can't have uniform designs. They have to be region and sub region and if need be village cluster specific. Unfortunately, both the Government of India and the state government have hardly paid any attention to this aspect and have failed to provide sufficient flexibility to design the schemes at local level. Financial and/or technical parameters are fixed by the apex organisations and they are rigid. Government should seriously review this problem and make necessary amends.

People who have long standing experience in working for development have also brought out that in order to alleviate the poor from poverty, efforts should be made to strengthen the mainstream economic activities and the participation of poor in it. Interestingly, people don't expect special assistance and special programmes for the poor forever. The main thrust has been to help improve the capacity among the poor to take initiatives and to provide ample opportunities to support the initiatives.

## 15 : POVERTY ALLEVIATION

Manganbhai Parmar\*

### Objectives

Rapid socio-economic development of the backward classes so as to remove rural poverty through special development programmes.

### Background

Implementation of 20 - point programme to alleviate poverty has received highest priority. Integrated Rural Development Programme has been implemented and many new schemes and projects started under this programme, especially to give social justice to SC and ST families, equality to women and housing facilities at the low - cost.

### Problems

- [1] Training centres are few and the choice of vocations is limited.
- [2] Women's welfare problems
- [3] Effective implementation of housing schemes and employment schemes is required.

### Recommendations

The number of training centres in rural areas should be increased and the type of vocational training should be diversified so that the youth can choose a vocation of their interest. All the village level centres should decide which courses will be conducted so that there are ample opportunities for selection of the course conducted. Hostel facilities attached to the training centres would facilitate outstation students to undertake training. This type of plan would also cut down unnecessary costs involved in conducting same courses in different centres which may result in overcrowding in the job market in a particular vocation. Another important improvement should be in terms of proper co-ordination between government agencies and the Banks.

- District member of SWCRA Implementation programmes - 1988

Employment projects like Ambar - Charkhas and machine manuals for plastic wares could be started in slum areas and rural areas for women's employment. NGOs can be very effective and successful in looking after women's welfare schemes by creating an awareness among women through interaction with the women on person - to - person basis.

Areas where houses are built under the housing schemes do not generally have access to the village school and markets. Moreover, approach roads are not built properly. The criterion for judging the beneficiary of the employment schemes is ownership of land. There may be injustice because records may not show land under the person's name simply because the records may be old. So the best way to judge the beneficiary is to assess the present status of the person and his family. Secondly Gram Panchayats could be entrusted with the responsibility of registering the local people for benefiting from the employment schemes - this method would also ensure social audit and responsibility on the part of the beneficiary in the use of resources.

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Interview 15.2

Nanakbhai B. Bhatt\*

**Objectives**

Rapid socio - economic development of the backward classes so as to remove rural poverty through special development programmes.

**Background**

Implementation of 20 - point programme to alleviate poverty has received highest priority. Integrated Rural Development Programme has been implemented and many new schemes and projects started under this programme, especially to give social justice to SC and ST families, equality to women and housing facilities at a low - cost.

**Problems**

- [1] Training in the Training Centers is not linked to employment guarantee and not inter related to traditional occupations.
- [2] Lack of proper co-ordination between commercial banks and government agency. Therefore loans are not sanctioned easily to start an enterprise.
- [3] Upliftment of poor women in terms of economic and social status needs more attention.

**Recommendations**

The training centres should conduct such courses which have relevance to their traditional occupations and the course content should be field work oriented. Middle - level technology needs to be introduced. In cotton growing districts, ambar charkhas, thread-making etc. can be introduced through co-operatives. However, cattle-breeding, tannery, bio-gas, mutton tallow should be started on commercial basis. These programmes could prove to be a good source of employment in the interior rural areas.

Training courses should be organised particularly for poor sections of the society.

- State Commissioner (Rural) - 1992
- Founder Member/Secretary Melaadi (Tribal Rural Development Trust) Bhavnagar 1983
- Executive Member - Gujarat Rural Labour Welfare Board - 1993.

After completion of training, trainees should be given proper financial assistance and to start their own enterprises. Loans should be sanctioned by the banks speedily and so on soft terms. For this matter proper coordination between the government agency and the banks is very essential. Alternatively, group financing agency, aided by the government could prove to be useful in giving speedy loans at subsidised rates of interest. Any types of financial aid should essentially be on the basis of poverty-level of the family or individual concerned and not on the basis of caste/tribe. The IRDP beneficiary list is made under the supervision of and collaboration with the Sarpanch. This practice can involve prejudice on the part of the Sarpanch, therefore a parallel IRDP beneficiary list should also be prepared by NGOs so that there is a check on any malfunctioning. Financial aid as well as technical knowhow

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of the use of modern agricultural implements is essential for the scheduled tribes. Free medical aid does not reach the really needy. Therefore, satellite units of PHC which should be manned by trained local people could be more effective than the one PHC at the taluka level.

To uplift the women socially and economically, they should be made literate. Practical knowledge regarding the techniques of marketing their products and saving money should be imparted to them. The purely target-oriented attitude and perception of the governmental authorities to sanction loans to the beneficiaries should change and instead genuine efforts be made to monitor the use of the loans sanctioned to the target group. NGOs should also be involved for this purpose.

**Sarah Z. Ahmed\*\***

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\* Director, District Rural Development Agency, Junction Plot, Rajkot-1

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**Interview 15.3**

**Mahesh V Joshi\***

**Objectives**

1. Identification of rural people properly.
2. Suitable schemes for eradication of poverty.
3. Providing minimum needs to them.

**Background**

Change in Government administration for outlook towards poverty alleviation schemes.

**Problems**

- [1] Job opportunities.
- [2] Accommodation and needs.
- [3] Money spent does not reach poor people.

**Recommendations**

- [1] Development of rural and urban activities for employment.
- [2] Government Agencies and corporations should join hands with NGOs.
- [3] Remove corruption.

**Action Plan**

**(i) Short Term (2-3 Years)**

Technical and devoted staff for the DRDA scheme.

**(ii) Medium Term (5 Years)**

DRDA activities should be expanded to cover regular employment programme.

**(iii) Long Term (10 Years)**

To remove corruption.

**Issues**

- [1] What are the new guidelines provided to you to identify poor people living below the poverty line?
- [2] What type of schematic change is necessary for poverty alleviation in Gujarat?
- [3] What kind of administrative changes are necessary for effective poverty alleviation programme?
- [4] What kind of help you require from outside the government agency?

**Recommendations**

- [1] We received revised guidelines during the middle of the eighth five-year plan. Computerized questionnaire is given to us to survey and identify families living below the poverty line. Experiment is made to identify poor people as per Lakadawala committee norms.

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\* Reader in Economics, Saurashtra University, Rajkot-5

This situation warrants a policy initiative to be taken by the Government so that firm programmes are planned and implemented to bring the handicapped regions close to par with other well endowed ones. While the development of all regions in the State has to continue, the main thrust should be towards removal of imbalances amongst various regions of the State. This alone can ensure the unity and integrity within the State.

#### **1.4 Imbalance between Urban and Rural Areas**

Similarly, there are also imbalances between rural areas and urban areas. Though the urban areas produce more wealth per capita, there are problems of urbanisation such as creation of slums, discharges of objectionable effluents, pollution and paucity of fresh water, overloading of services etc. which are becoming increasingly difficult for the Government to tackle. There is thus an urgent need for creation of an environment under which the rural areas could develop at a faster rate giving rise to self generating economy. This alone can prevent migration and partly reclaim the youths which have migrated to the urban areas. While government has been fully aware of this solution and various plans have made provisions of various schemes in different sectors of economy, the impact has not been sufficient. Perhaps the gap has been widening due to steep rise in cost of living and still steeper rise in the expectations of the people at large for improvement in their economic condition. The rural folks do not see any future for their posterity. Situation in urban areas is no better.

There is, however, a difference between the urban and rural areas. Urban growth has its roots in private sector, while Government provides only infrastructural facilities. The rural areas on the other hand do not have any motive-power at present. Government has to create an environment in which rural areas are sufficiently motivated to move on their own towards self sufficiency and generation of economy on a sustainable basis. Socio-political climate has also kept the rural society divided.

#### **1.5 Tribal belts**

Gujarat has on its eastern corridor bordering with the adjoining States, a tribal belt. The adivasis living in this belt have their own culture and are looking towards getting at par with the neighbouring rural folks while retaining their culture and present work places and homes.

Specific programmes were incorporated in various Five Year Plans both within country as well as State but visible impact has not taken place.

### **2.0 Suggestions on Planning**

2.1 Planning is a continuous process and requires continuous monitoring and periodic appraisals of the performance in various sectors. This would provide a feedback on future planning and implementation strategies for more efficient and effective performance. With this objective, I take liberty to suggest the following:

#### **(a) Perspective Plans**

Each Sector of Economy should have Perspective Plan covering a period of 15 years. This was, I believe, accepted by the Planning Commission sometime back but has not materialised. Each period of 15 years should have a base-line survey of all relevant indicators for facilitating subsequent appraisals to be independently carried out by a reputed agency preferably outside the Government which is sample checked by another agency. This period of 15 years should be broken up into 3 steps of 5 years of each coinciding with the spans of 5 Year Plans of the Country as well as of the State. There should be midterm appraisals made in the 6th, 11th, 16th and 21st

years for performance evaluations of the Perspective as Five Year Plans. With each mid term appraisal, the Perspective Plan should be extended by another 5 years. Thus the Perspective Plan should continue to cover a period of 15 years but its content and strategies may change after each 5 year appraisal and review.

The 5 year Reviews should be co-terminus with formulation of 5 Year Plan and take into account the resources, human, material, finance, equipment, technology, input by private sector etc. available for the next 5 year plan period and also the scope and size of the 5 year plans have to be determined keeping in view the capacity of the Government to mobilise resources after assigning inter-se priorities amongst various sectors of economy for achieving the targeted sustainable rate of growth of economy.

### **(b) Five Year Plans**

Once the Five Year Plan is finalised as per prevailing practice subject to such modifications as may be warranted by the perspectives envisaged in the First 15 year Perspective Plan, the same will be re-appraised in the 6th year. The second FYP can, however, continue on the basis of the Perspective Plan for the 6th year, but would be reviewed in respect of another 5 year period covering 7th to 11th year.

### **(c) Annual Plans**

Annual Plans can be continued as per practice hitherto. However, the emphasis should be on strict monitoring and critical analysis of major shortfalls in large works/programmes. The intention is to maintain a record of such cases and derive lessons for the future. Each Annual Plan should have an annex of successes and shortfalls with analytical discussion which can be of future use. Implementation strategies should be reviewed and modified to avoid deficiencies observed.

## **2.2 Administrative Measures**

Existing organisational set-ups of Departments may be reviewed and restructured to create efficient units which can implement the above suggestions in timely and effective manner. Horizontal barriers which today exist amongst various Departments should be removed and the officers at middle and senior levels should have free access and freedom to know and respond to related activities of other Departments for efficient and timely implementation.

## **3.0 Water**

Water is a prime natural resource, a basic human need and a precious national asset. The extent to which water is abundant or scarce, clean or polluted, beneficial or destructive has a major influence on the quality of human life. Water plays a crucial role in the rapidly changing phase of our planet brought about by rapid development on all fronts, rising population and fast rate of scientific and technological advances. The ever increasing demand for water on one hand the deteriorating quality of water by pollution on the other, have already created serious problems. Water can no longer be taken for granted. It has to be treated as a valuable resource. Although, it is renewable, it is limited. Available water must, therefore, be optimally harnessed and used most beneficially under appropriate priorities of use.

Self sufficiency in energy and food is an important national goal. The world has ultimately to move towards the sustainable development based on renewable resources. Water being a renewable resource has to play an important role not only in sustaining economic and social gains but also in furthering their values.

Although the per capita availability of water in India is reasonably good compared to global availability, the utilisable quantity is much less because India has a monsoonic

climate and 85 to 90% of the river flows occur during the four monsoon months. Many of the small rivers are totally dry during fair weather. Flood is a recurring phenomenon in the country. The position in Gujarat is worse. It is drought affected and water-short State. Being a lower riparian, it has to depend on upper States for water.

Damage due to flood is on the increase on account of the encroachment of the flood plains by main and deposition of silt in the river beds and in the flood plains. On the other hand one-third area of the country is afflicted with droughts. The country thus, suffers from floods and drought every year in some region or the other.

The future scenario clearly bring out that more complex and difficult projects and water management programmes lie ahead both in terms of costs as well as engineering complexities and inter-state implications. 90% of the water in our country as well as State flows in the inter-state rivers. We have to avoid these rivers becoming rivers of discord.

Improved water management is an important as undertaking of new water development projects, if the growth process is to be sustained in the years to come. Waste will have to be eliminated and the efficiency of water use and reuse stepped up. The ever increasing demand for various purposes, the changing pattern and mix of the different types of use of water and limitation on the additional availability of water clearly indicate that a time has come to review the criteria for economic appraisal for according approval to projects. All benefits as well as negative environmental aspects must be taken into account. Efficient use and improved returns from existing projects can provide great impetus towards enhancing the economic viability of new projects.

The largest use of water has traditionally been for irrigation. In India 90% of all water are being used for irrigation. Mounting population and improved standards of living are pushing up the demand for food and fiber. The available water resources will, therefore, have to satisfy the increasing demand for irrigated agriculture which plays a crucial role in raising the food and fibre supplies. Modernisation of existing projects must occupy an important place in the country as well as States.

The criteria for good irrigation management should be increased productivity per unit of water, assurance of timely supplies, equity of water distribution, and stability of production under sustained irrigation.

Drinking water for the community is the most vital of all demands on water and has rightly been assigned the highest priority of use under the National Water Policy. Unfortunately even after concerted efforts during the various Five Year Plans, the situation with regard to the provision of drinking water and sanitation facilities in both urban and rural areas is far from satisfactory. Meanwhile the demand of water for the industrial sector is also steadily increasing. On the negative side, effluents from both domestic and industrial, and agricultural activities (fertilisers, pesticides, agriculture wastes) are causing pollution of water bodies. The effluents, after proper treatment can, in fact, be reused for various beneficial purposes. Waste water can, thus be looked upon as a source of additional water. This aspect would need increasing attention in future.

Water knows no man-made boundaries such as inter-national, inter-State or inter-District. Water has a variety of uses but in view of its limited availability, priorities of use of water for different purposes have to be assigned. Broadly there are two categories of water use:

**(a) Instream:**

Hydropower, fisheries development, recreation, navigation, abatement of pollution in downstream reach etc. These are also called non-consumptive uses.

**(b) Offstream:**

Withdrawals for irrigation, water supply for municipal and industrial use, diversion for abatement or dilution of pollution in other basins, ground water recharge, reclamation of land etc.

**4.0 Proposal for consideration**

**4.1 National and State Water Policies** In order to prepare long term plans for development with limited quantum of water, to achieve the optimum benefits, it is essential to have both the

(i) National Water Policy (comprehensive policy is under drafting at Centre)

(ii) State Water Policy

This has to be evolved and approved by the Government on a priority basis keeping in view national/international precedents regarding allocation of water among different uses and different region/states.

States are free to have free planning within its policy frameworks for intra-state rivers but for inter-state rivers, Central Government has to play a mediatory role in achieving optimum results keeping the national interest in view.

Gujarat fortunately has its shares in major river waters already decided by Agreement/Tribunal viz. Tapi, Mahi, Narmada, Sabarmati and Damanganga. However, agreements have to be reached on inter-State rivers south of Tapi.

**4.2 State Water Plan**

A number of schemes have been planned and implemented during various Plans. Hardly few schemes now remain to be planned in major/medium/minor surface water sector. Ground water is also being over exploited in many regions of the State which has created several problems.

All the schemes, after performance review and reappraisal have to be integrated into a State Water Plan which in effect would interlink the river systems and transport water over long distances for removal of imbalances in water availability. Such a plan has to cover all sectors of water use in the State.

With the liberalisation of economy the State has to face stiff competition from World markets but has also great opportunity to market its goods and services abroad. Geographically, Gujarat with its long coastline and the emphasis on Port Development, is well placed in this respect. For major projects viz. Narmada, Ukai-Kakrapar and Mahi-Kadana there is a great scope for development of agro-industries and marketing agro-products abroad. The Plan has to keep this possibility in view.

Preparation of Master Plan for integrated development of water within the State is over due and should be accomplished with utmost speed. Potential of rivers south of Tapi, enroute rivers along the Narmada Main Canal and of the remaining unsurveyed rivers should be assessed and incorporated in the State Water Grid. Conjunctive use of surface and ground water should form integral part of the Plan. All water resources such as drainage from command areas and areas not tapped by dams should be considered. Treated effluents should be used for irrigation, if necessary after mixing with sweet water and brackish water should be used after mixing with sweet water. Reuse of regenerated water should be considered, ground water recharge through feasible schemes should also be considered.

## 5.0 Irrigation

### 5.1 Major, Medium and Minor Schemes

#### 5.1.1 Background

These are almost totally storage backed with the canal system providing water for irrigation. The net cropped area of the State is 96.54 lakh ha. The ultimate irrigation potential of the State is 36 lakh ha. from major/medium schemes and 3.5 lakh ha for minor surface schemes. Ground water potential is 25.5 lakh ha. This includes the full development potential of the Sardar Sarovar Project. Major/medium schemes provide irrigation to large blocks leaving surrounding areas high and dry. There is considerable encroachment of farmers from un-commanded side of the canals, who pump water un-authorisedly. By 1995-96, a potential of 13.53 lakh ha. is created from major/medium schemes and about 12 lakh ha. is actual irrigation. The corresponding minor irrigation potential is 2.13 lakh ha. with 1.15 lakh ha. as utilisation. The corresponding ground water potential and utilisation figures are 20 lakh ha. and 17 lakh ha. respectively.

The minor schemes depreciate at a much higher rate due to silting of tanks and as a result the actual irrigation from minor tanks has been decreasing. In spite of more and more minor schemes, coming into the operation as a result of scarcity works in droughts or otherwise, the actual irrigation has been decreasing. Minor surface irrigation is a vanishing facility for irrigation. However, they do provide water for drinking.

With regard to irrigation programme, the Govt. has to reckon water as a precious resource which we can ill-afford to waste. The economic cost of surface water being conveyed from Narmada storage reservoir to Kachchh or Saurashtra, will be very high. Only industries can afford this. Govt. has, therefore, to ensure optimum use of this water. Every drop of water should be used most efficiently, producing high value crops which can be marketed along with the processing of agro-industrial products which can fetch economic returns to the Government. For Narmada project it can be said that if water entering the Narmada canal from the headworks is silver it becomes gold by the time it reaches the remote high areas of Saurashtra and Kutch. Govt. has to take note of this huge subsidy which converts into a hidden subsidy after the project is completed. We have to introduce sprinkler and drip irrigation in areas where it can be cost-effective so that water consumption is reduced to half. Water thus saved can be used for extending irrigation facilities to larger areas.

## 5.2 Proposals

### (a) New and On-going Schemes

On-going schemes should be reviewed and rendered more cost-effective and then implemented in shortest possible period to bring them to fruition.

#### Sardar Sarovar Project

Preparation of a Master Plan for drainage as well as conjunctive use of ground water and surface is overdue and needs to be finalised under the direction and guidance of renowned national and international experts.

### (b) Water Management

There is pressing need to ensure that all the canal systems function in the most efficient manner so that agricultural production, both in quantum and value, rises for the unit quantity of water consumed. In this context the command area development authorities require to be reactivated for taking up the massive programmes of

upgradation and modernisation of water distribution systems for adequate and timely supply of water, introduction of warabandi system, farmers' participation in water distribution, comprehensive programme of providing inputs for the irrigated agriculture and providing necessary infrastructure leading to change over from existing cropping pattern to more remunerative cropping pattern. There is need to keep proper accounts of input output values in command areas.

In this connection, Government of Gujarat has formulated a new Irrigation Bill which has been pending enactment for last several years. This bill provides for formation of Water Management Committees which will distribute water amongst the farmers, and giving certain powers to Irrigation officers for equitable distribution of water. Without this Bill, the Narmada Project cannot be a success because the allocation of water from the Narmada project is hardly 30 inch at the reservoir of which 8 inch will be provided from ground water. As against this, the Punjab and Haryana States which today, has highest water use efficiently consume 30 inch of surface water. Narmada project has provided lined channels for prevention of losses right down to the field. Even the, to achieve utilisation levels provided in the project is a herculean task (though certainty not an impossible one). The other two projects viz. Mahi-Kadana and Ukai-Kakrapar stand in stark contrast. Their efficiency of water use, measured in terms of delta of water consumed at the field is almost half that of Narmada. Because of lack of controls in initial period of development, these two schemes resorted to water intensive cropping patterns exceeding those in the projects such as sugarcane perennials, summer paddy etc. However, all efforts have to be made to change them to more or equally remunerative and less water consumptive pattern. Large waste of water can thus be avoided. Water saved can be fed into State Water Grid. Such a programme of stepping up efficiency of water use in Ukai-Kakrapar and Mahi-Kadana is feasible, provided the targets are realistically fixed and implementation strictly monitored. As regards, minor irrigation schemes, programme of digging tanks for deepening and creation of storage is not an economic proposition. Better strategy will be raising the tank banks by borrowing earth from existing silted up reservoir beds. Life of minor schemes can be substantially lengthened by undertaking water shed developments on a State-wide scale.

### **Ground Water Legislation**

There is pressing need to enforce Ground Water Legislation which has been passed by the State Government. This alone can help in reducing the lowering of ground water tables and prevent catastrophe of totally exhausting ground water in tubewell area resulting in drying of all wells.

### **Micro-watershed Development**

After all irrigation sources are exploited, Gujarat will still have 50% of its cultivated area without any irrigation facilities. Major portion of these dry areas are subjected to the vagaries of rainfall and recurring droughts. A State-wide programme for alleviating the hardships and lack of irrigation facilities has to be launched so that everyone can have some reasonable facilities for growing atleast one crop though not to the same productivity as that of major or medium irrigation schemes. For the success of such a programme, a highly scientific approach using the latest technologies available has to be adopted. At present check dams and underground dams are being built for intercepting water during monsoon. This can tap only a fraction of water going waste into the sea even if entire river is check dammed. Further the benefits of check dams get confined to small border along with riverine banks extending upto the height of the check dam. In order to have much more



effective programme, a micro shed development scheme have to be launched. This would cover both cultivated as well as forest and grass lands. The formulation of such a scheme has to be done scientifically and professionally. The entire area has to be divided into micro catchments which will be clearly as identified on large scale maps which should show the survey numbers of villages. Contour survey should be carried out preferably through Survey of India showing contours at 15 cm intervals. Satellite imageries will help in marking lineaments and water bearing areas. Thereafter the latest aerial photographs (if these are not available, they have to be prepared after aerial photography) should be obtained from Survey of India. The photographs should have required lateral as well as end overlaps to scan them through stereoscope. This would give 3-D relief to the entire area which would facilitate identification and marking of various water conservation structures such as contour bunds, check dams, percolation tanks, recharge wells, etc. It would also help in making areas for afforestation and for enrichment of existing grasslands. Several experiments have been done on a small scale for such a programme but it is not known whether the programme has been formulated on scientific lines as mentioned above. While the programme has to be State-wide, the priority will have to be given to the drought affected areas, specially in Saurashtra, North Gujarat and Kachchh. The techniques will be different for Saurashtra, Kachchh and North Gujarat because of the specific distinguishing features viz. relief of land, sub-soil structure, soil characteristics, rainfall and agro-climatic conditions etc.

We have three years before we enter the 21st Century. In this period, all the base work viz. preparation of pilot schemes, for or five covering different regions of the State should be completed and a pilot project implemented for evolving planning and design criteria for State-wide programme. Some results will also be available about the efficacy of the programme in these three years if expeditious progress is made on the pilot projects. This programme can become success only if we are able to motivate the farmers and the tribals living in tribal belt where existing irrigation facilities are almost nil and induce them in participation in implementation of the programme. Govt. can provide planning, supervision and certain infrastructural supplies which are not locally available. The labour components has to largely come from the villagers. They should be able to take care of the works during maintenance. The whole design has to be so made that future maintenance is minimum. This can be achieved by interweaving afforestation and turfing into the works being implemented so that earthwork which is a major component does not get eroded and washed out by raincuts. Even the erosion of the land in general can be stopped by afforestation and creating barriers of permeable vegetation within the bed of the drains and rivulets.

This should also help in recharging. In United States, there is a Water Conservation service. Similar service has to be created in the State after the performance of the Pilot Project is evaluated and design criteria evolved for the State wide programme. There is no need to have extra recruitment. The existing cadres in the State from Agriculture and Irrigation should be able to take care of the programme by suitable organisational restructuring and motivation induced amongst the Government staff.

Today, new medium and minor irrigation schemes cost about Rs.1 to 1.5 lakh per ha. After the schemes are completed, it is found that all the projected area under irrigation does not receive water. Therefore, today's cost in practice comes to about Rs.20 to 2.5 lakh per ha. The cost of this microshed development programme is expected to be much less but the benefits will also be correspondingly less. The benefits from this programme would, of course, be dependent on the monsoon rainfall. In a drought year the benefits will be less. However, in a good year, if there is sufficient ground water recharge in the earlier year, the same can be useful in the succeeding

lean year. This programme will also help significantly in reducing the silt charge in the reservoirs and will be of help to minor, medium and major irrigation schemes in reducing the silting of the reservoirs. At the same time, the inflows in the reservoir will also get significantly reduced because of the large microshed development programme in the upper catchment. This, however, will have to be taken care of by improving the existing water management practice especially, the efficiency of water use. Also sprinkler and drip as well as other water saving strategies can be adopted to maintain the present level of irrigation in the major and medium schemes. The programme will build up moisture within the soils and would help growth of vegetation including crops and improving the yields. The great advantage of this programme would be that it would be peoples programme since each farmer can count on certain benefit derived therefrom the visuals as well as by experience.

### **Ground Water Recharge**

This scheme is in fact a part of the micro watershed development programme described above. Water which is flowing down the rivers through monsoon period and wasted into the sea can be diverted through the canals and ditches to areas which have good recharge potential. Injection of water into the ground water through reverse pumping can also help to increase the recharge capacity. However, the water used should be of acceptable quality otherwise the existing ground water aquifers will get polluted. This programme can be more successful in North Gujarat region. Here all available waters (taking care that polluted waters are not used) should be diverted for ground water recharge. This is also a very scientific programme which has not been adopted on a large scale atleast in our country. Appropriate technology has to be developed taking account the availability of water, areas suitable for recharge etc. Satellite imageries, subsoil information, regarding existence facilities, identification of areas which are most suitable for recharge. The availability of suitable water and the proportion of water recharged to that available for actual use has to be studied and suitable areas after study of configuration of existing aquifers available for recharge identified within the State through a team of professionals viz. hydrologist, hydro-geologist, cartographer, agriculturist, irrigation engineer, etc. Satellite imageries, ground water modeling both for quantity as well as quality are essential. This should not be a problem since computer software can be designed or modified. Such a programme coupled with the input of Narmada waters and implementation of micro shed developments would certainly not only arrest the downward movement of the ground water table but would also raise it sufficiently high so as to make a major dent in the consumption of the diesel and electricity which be saved for further development of agriculture and industry in the State. Today, there is excessive consumption of electricity because of the lowering water table and a Government is highly subsidising lift pumps by charging only a nominal rate for power consumption.

### **Improvement of Efficiency of Ground Water Pumping System**

Another major programme is the improvement in the efficiency and performance of ground water pumping systems with either diesel or electricity. The sample surveys carried out by various organisations have indicated that upto 50% of power or diesel can be saved by improving efficiency. There is a mis-match between delivery and suction pipes intake arrangements are not scientific the pumping set has a low efficiency of impellers as well as electrical motors. The pumps are not designed for the quantity and head of water to be pumped etc. For deep tubewells also, the submersible pump has to be replaced with continuously lowering ground water in the interest of improving efficiency and saving electricity. If a major offensive is launched for this programme atleast 25% to 30% of energy can be saved. If say 2000 MW is presently required for the pumping atleast 400 MW can be saved which

would cost at present Rs 1,600 to 2,000 crores, if transmission cost is also considered. Number of NGOs and institutions have done pioneering work in the State as well as country. Their reports are available. State-wide programme for this task will be much more rewarding.

### **Drainage and Flood Control**

With the construction of large reservoirs, especially, Ukai which has a sizeable flood cushion, the floods in Tapi and Mahi rivers have considerably reduced. As a result, the riverine reaches especially the city of Surat has developed phenomenally although major portion of the area of the city was flood prone in pre-Ukai conditions. After construction of Sardar Sarovar Project, there will be some relief but fury of Narmada river will continue for a long time until reservoirs in the upper reaches are also built.

However, a new problem of flooding has now risen in hitherto unknown flood prone areas, specially the Mahi command area. With irrigation water table coming up, the water absorptive capacity of the area has decreased and as a result even with moderate rainfall there is lot of flooding. The problem has aggravated because of the choking of the drainage channels. The problem has assumed alarming proportion since it lasts for a month or more disrupting the communication and creating health hazards. The complete drainage plan requires to be prepared for the Mahi system on a priority basis envisaging widening of the existing drains. Administrative and legislative measures will be required for prevention of encroachment of the drains and dumping of refuse from rural and urban areas into the drains. The drains should have regular pre-monsoon inspections. Adequate funds should be provided for maintenance.

Bhal area bordering the Gulf of Khambhat is suffering from acute drainage conditions and salinity. After irrigation from Narmada, the problem is bound to aggravate itself. A well planned drainage strategy is required to be chalked out as mentioned earlier.

### **Data Base**

With regard to water as in other sectors, there is no database of value. This has to be built up after collecting all relevant data and statistics and after verification of the same, for various application such as Planning, design, implementation and operation. Such database will also be useful to reply to various questions which are being raised both in the press as well as outside, in Vidhan Sabha and Parliament etc. Urgent action is called for to build the database and to maintain it on a continuing basis. Appropriate software has to be developed for quick retrieval and utilisation of data for various applications.

## **6.0 Energy**

Gujarat has very limited hydro power potential. After commissioning of power plants at Sardar Sarovar Dam, hardly any potential will be left untapped except few micro-hydel schemes largely on Narmada Canal system falls and small reservoirs south of Narmada. These deserve high-priority. Gujarat has possibility of tidal power generation in the Gulf of Kachchh and Gulf of Khambhat. The State has to explore sites for pumped storage for meeting the peak demand in the most economic and efficient manner.

## **7.0 Domestic and Industrial Water Supply**

The most urgent problem of Gujarat is to provide safe drinking water to every village and urban area. Sardar Sarovar Project has enough allocation for this purpose and it is high time that a complete Master Plan is prepared and implemented for supply of drinking water to all the villages and urban areas. It would be great event if we can proudly enter the 21st Century with every village in the State supplied with minimum safe drinking water. This is feasible, if the issue is taken up with all the seriousness that it deserves.

The following measures deserve consideration:

1. There can be substantial reduction in waste by reducing leakage in domestic water supply from the present 17 to 44% to a possible 10 to 12%. Consumption can also be brought down by using low volume flushing systems. For smaller communities two pit latrines should be provided in place of water borne sewage system.
2. For housing colonies and clusters of high rise buildings, a two pipe system should be used, one for treated water for personal use, and the other for raw or recycled water for lawns, gardens and flushing tanks.
3. Maximum use should be made of waste water for irrigation and industry after partial treatment according to requirement.
4. Location of industries using large quantity of water should be decided on the basis of availability of water. Plant design should take water economy into account. Industry should normally be charged the full economic price for treated water.
5. Harnessing rain water and its storage by individual house-holds is a good alternative wherever other means are not available or are too expensive.

## **8.0 Environment**

1. Assessment of environmental impact and ameliorative measures should be a part of the project formulation itself. Environmental clearance should not, however, become a source of obstruction and undue delay.
2. Case studies should be taken up to assess the environmental and socio-economic impact of existing major projects in the State, so that discussion does not take place in vacuum or on foreign data.
3. Quality of surface and ground water must continuously be monitored. Requirements of treatment of effluents before discharge into natural water ways should be realistically fixed, but once fixed should be stringently enforced.
4. Work should be taken up on soil conservation in catchment areas keeping in view the relationships between land use and hydrology.

## **9.0 Research**

Research is very important for development of water resources. Some of the important areas for research are:

- \* Exploration of ground water by remote sensing
- \* Mathematical modelling of river flows
- \* Increased water use efficiency and productivity in irrigated agriculture

- \* Salinity control, reclamation of saline lands
- \* Economies in treatment of waste water
- \* Studies on land use and run-off
- \* Economy of water in cooling towers and waste heat recovery systems
- \* Development of indigenous low cost designs for bulb or other types of turbines for small hydro schemes.
- \* Problems created by influx of sediments in case of run-of-the river hydro-power schemes in hilly areas.
- \* Desalination technology
- \* Computer applications in planning and design of hydraulic structures
- \* Systems analysis for integrated operation of linked systems, and for conjunctive use of water resources for optimum production.

## **10.0 Conclusion**

### **Year 2000 AD**

This is undoubtedly an epoch making event. We should enter the 21st Century with new ideas, new programmes and new weapons, if a breakthrough is to be made. Revolutionary changes in the administration systems and in Government-people relationship leading to active participation of people are called for. Economy, efficiency and quality should be the watchwords since, with the opening of our economy to global arena, stiff competition lies ahead. Poverty will automatically get eradicated with well planned programmes including environmental safeguards provided they are integrated and harmonised. The face of the Planner should be towards the rural folk.

## **Towards Responsive and Effective Government**

N. Vittal

### **1. Objective**

Gujarat Government must be the most responsive people friendly and also be the most effective one. Government should be facilitator for business.

### **2. Background**

The path to hell is paved with good intentions. Government systems, designed to be objective and fair, need rules to function. In the process they become impersonal, secretive and red tape ridden.

### **3. An Agenda for Action to Design a more Responsive and Effective Government**

#### **Transparency**

There must be Gujarat Freedom of Information Act so that access to Government information becomes more easy and widespread

#### **Citizen's Charter**

On the lines of Government of India, Gujarat can draft a citizen's charter spelling out the expectations and responsibility of the different government organisations to the citizen's of Gujarat.

#### **Diagnosis of Image and Problems**

The perceptions about different organisations in Government and outside must be got by

- (a) A two month exercise government wide where every department can point out the faults, waste of money and time etc. about the departments
- (b) A two month long exercise by Government departments at different levels to get a feedback (positive and negative) about their performance.

#### **Re-engineering Government Process**

The procedures must be simplified in prescribing single formats wherever applicable. This must be followed by a reengineering exercise to reduce delays in Government process to meet people's expectations.

#### **Information Technology (Computer and Communications)**

- (a) The entire Sachivalaya must be networked through computers for sharing of data and information. The existing communications network set up by the NIC may be used to the maximum extent upto the district level.
- (b) There must be Government wide application of IT. Agencies like MAIT or similar organisations may also be involved for studying each Government organisation to explore application of IT for the benefit of the people and the administration.
- (c) Laws must be amended to make application of IT legally valid especially when documents, evidence, etc. are concerned.
- (d) Leasing instead of buying the IT systems will be better, infrastructure lease Financing Limited can be used for the purpose of raising resources.

## **Corruption**

Systems must be designed to reduce scope for corruption Action under 3.1, 3.2, 3.4 and 3.5 will help to reduce corruption.

## **Reinvesting the Government**

The 10 strategies listed by the Osborne and Goebler in their book "Reinvesting Government" can be applied mutatis and mutandis to design - (i) Catalytic, (ii) market driven, (iii) mission driven, (iv) competing (v) enterprising, (vi) Result oriented, (vii) community oriented (viii) Customer driven (ix) anticipatory, and (x) Decentralised.

## **Grace period for Industries**

As many clearances are needed for starting an industry, government may identify one or two key clearances and permit industries to start. There must be a grace period of five years within which industry can get other clearances. No inspector must harass industry during this period.

## **Sunset law**

The principle of sunset laws must be followed in all legislation. We can begin with making all laws connected with industry lapse by 31.12.1997. This will automatically ensure a review of the need and the functioning of the laws. For example boiler inspection rules are still of the 1930s vintage.

## **Zero Based Budgeting**

The ZBB technique must be adopted for all budget items rigorously.

## **Hospitals**

Public Health is vital. Information Technology must be used urgently to provide better service to the patients. A Hospital Maintenance Corporation may be setup to ensure upto date maintenance of hospitals/PHCs and provision of drugs.

## **Remove the cushions of safety**

The corrupt escape in our system many a time because of legal protections and cushion of safety limit over the years by series of CAT/Court judgements. These must be reviewed and removed systematically.

## **Institutionalise Innovation**

Any government system is bound to become ossified and out of date. By using ZBB and sunset laws we can build in an element of institutionalised review of programmes activities, organisations and procedures. But innovation is the key in the government system has to be relevant, responsible, effective and people friendly. An effective suggestion scheme for each organisation can be institutional mechanisms to spread the message of successful innovations and ensure that the government system does not become archaic, slow and trapped in red tape.

## Appendix-I

## LIST OF PARTICIPANTS

**District Level Meeting on  
Population**  
held at Surendranagar on April 16, 1997

- |                                                                                              |                                                                                            |
|----------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|
| 1. Prof. Vidyut Joshi<br>Vice Chancellor<br>Bhavnagar University<br>Bhavnagar                | 13 Ms Rekhaben Shah<br>20, Sanskar Society<br>Mamta<br>Surendranagar                       |
| 2. Prof. Dhaval Mehta<br>BK School of Business Management<br>Ahmedabad                       | 14 Ms Nayanaben H. Vora<br>13, Sanskar Society<br>Surendranagar                            |
| 3. Shri Batukbhai Vora<br>803/A Oxford Tower<br>Gurukul Road, Ahmedabad                      | 15 Ms Deviben S. Pancholi<br>Shri Pragati Mandal<br>Surendranagar                          |
| 4. Shri Rameshbhai B. Shah<br>HK Arts College<br>Ahmedabad                                   | 16 Smt. Shankuntalaben P. Shah<br>Dr. Shah Hospital<br>Nr. Handloom House<br>Surendranagar |
| 5. Shri Rohitbhai Shukla<br>SPIESR, Thaltej, Ahmedabad                                       | 17 Ms. Saroj Gandhi<br>"Asmita"<br>Dr. Rajendraprasad Road<br>Surendranagar                |
| 6. Shri A.V. Vora<br>B/13 Rahenuma Society<br>Sarkhej Road, Ahmedabad                        | 18 Dr. Manish R. Pandya<br>10, Sharda Society<br>Surendranagar                             |
| 7. Dr. N.B. Oza<br>Head of Department<br>Economics Bhavan<br>Bhavnagar University, Bhavnagar | 19 Shri Hasmukhbhai Vora<br>Ex-Member of Assembly<br>R. Sanskar Society<br>Surendranagar   |
| 8. Shri Jayakarbhai S. Mehta<br>Lecturer, Sociology<br>Shamaldas College, Bhavnagar          | 20 Shri Khushalbhai N. Jadav<br>Tokarala, Limbdi<br>Surendranagar                          |
| 9. Shri Binduben L. Popat<br>Principal, B.Ed. College,<br>Vadhavan                           | 21 Shri Bhupendrabhai Dave<br>Sanyukt Mahiti Niyamak Office<br>Rajkot                      |
| 10 Ms Bhanumati R. Mudali,<br>Aanganvadi Training Centre,<br>Vadhavan                        | 22 Ms Monghiuben R. Makwana<br>Mahila Utkarsh Mandal<br>Limbdi                             |
| 11 Shri Harisinh M. Barod,<br>Principal<br>Dajiraj High School, Vadhavan                     | 23 Ms Rudraben Acharya<br>Dajiraj High School<br>Vadhvan                                   |
| 12 Shri Khetasibhai K. Patel<br>17, Mitra Mandal, Dudhrej Road<br>Surendranagar              | 24 Ms Truptiben Acharya<br>Dajiraj High School<br>Vadhvan                                  |



- 25 Shri Nandkishor Dave  
Vadhvan Kelvni Mandli  
Vadhvan
- 26 Mr. Rushikumar Pandya  
Shram Vikas Sansthan  
Shiv Shakti Building  
Surendranagar
- 27 Shri Arvindbhai Charya  
Gharshala  
Vadhvan
- 28 Shri Jitendrabhai Bhatt  
12, Ashok Society  
Surendranagar
- 29 Ms Laxmiben H. Makwana  
Mahila Utkarsh Mandal  
Limdbi
- 30 Ms Rakshaben H. Dave  
C/o H.J. Dave  
Sanitarium, Ghogha Sarkal  
Bhavnagar
- 31 Dr. Sumanben Choudhary  
Sociology Bhavan  
Bhavnagar University  
Bhavnagar
- 32 Shri Ashokbhai Dave
- 33 Shri Bhadreshbhai Dave  
Journalist, Surendranagar

**District Level Meeting on  
Literacy & Education  
held at Godhra on April 4, 1997**

1. Shri Chudasma, Dy. District  
Development Officer  
Panchmahals
2. Prof. Gokulbhai Parikh,  
Consultant, Sardar Patel Institute of  
Economic and Social Research  
Ahmedabad
3. Shri M.C. Shah,  
Incharge, District Adult Education  
Officer, Godhra
4. Shri Hasmukhbhai Shah,  
Ex-Principal, Nutan High School  
Halol
5. Shri Vithalbhai P. Parikh  
Ex-Principal Arts & Commerce  
College, Bodeli (Halol)

6. Shri Chandubhai Mahida  
Nagar Palika Godhra
7. Dr. Kariya Principal,  
B.Ed. College, Godhra
8. Shri Prafulbhai C. Trivedi,  
Educationist, Godhra
9. Shri R.K. Shah,  
Principal, M.C. Modi High School,  
Devgadbaria
10. Shri L.R. Mehta,  
Ex-District Adult Education Officer,  
Godhra
11. Shri Vasana  
Taluka Development Officer, Godhra
12. Mrs. Hathila, C.D.P.O. Godhra
13. Shri D.M. Makwana,  
Education Inspector, Jilla  
Panchayat, Godhra
14. Mr. Patel, Officer District Primary  
Education, Dept. Godhra
15. Shri Palas, Education Inspector,  
Godhra
16. Principal Mr. Patel,  
Technical High School, Godhra
17. Mrs. Kusumben Shah, Principal,  
Girls High School, Kalol
18. Shri Dinesh Patel,  
Education Inspector, Dahod

**District Level Meeting on  
Literacy and Education  
held at Vadodara on 15-04-1997**

1. Smt. Padma Ramachandran,  
Vice Chancellor,  
M.S. University of Baroda, Baroda
2. Prof.V.N. Kothari  
Economics Deptt.  
M.S. University of Baroda, Baroda
3. Prof. N.M. Pandya  
Economics Deptt.,  
M.S. University of Baroda, Baroda
4. Mr. T. Sajikumar,  
Economics Deptt.  
M.S. University of Baroda, Baroda
5. Ms. Ushaben Shroff  
Ex-Principal, Sardar Vidyalaya  
Bapod Jakat Naka, Baroda.

6. Mr. Harshadrai B. Patel  
Principal, Alembic School, Vadodara
7. Mr. Raojibhai Patel  
Ex-Principal,  
Lal Bahadur Shastri Vidyalay,  
Harni Road, Baroda
8. Mr. Jayant Shukla,  
Educationist, Secretary, Nutan Bal  
Shikshan Sangh, Baroda
9. Dr.(Mrs.) Neela Shelat  
Education Deptt.  
M.S. University of Baroda, Baroda
10. Dr. Ramesh Kothari  
Education Department  
M.S. University of Baroda, Baroda.
11. Dr. S.P. Roy (Rtd.)  
Education Department  
M.S. University of Baroda, Baroda.
12. Dr. Jyoti Christian  
Education Department  
M.S. University of Baroda, Baroda.
13. Dr. P.S. Choondawat  
Sociology Department  
M.S. University of Baroda, Baroda
14. Mr. Mahesh Amin  
Ex-Principal,  
Experimental School, Baroda
15. Mr. Hariharbhai Patel  
Principal, Experimental School,  
Baroda

**District Level Meeting on  
Environment and Afforestation  
held at Bharuch on May 2, 1997**

1. Ms. S. Aparna, I.A.S.,  
District Collector, Bharuch
2. Dr. N.M. Padya  
Economics Department  
M.S. University of Baroda, Baroda
3. Shri D.A. Anandpura  
Leading Industrialist and Chairman  
Environment Preservation Society  
Ankleshwar
4. Dr. Praful Dave  
NCERT Professor (RTD)  
76, Pritam Society, Bharuch
5. Shri Paragji M. Patel  
Farm Leader and Educationalist  
Balsambhedana Trust, Nikora,

- Bharuch
6. Prof. B.R. Trivedi  
Professor of Economics,  
Jambusar College, Jambusar,  
Bharuch
7. Ms. Vasanti K. Diwangi  
Rtd. Principal, Union High School  
Chunarwada, Bharuch
8. Shri Batuk Vora  
Freelance writer, Ex-MLA, Member  
Gujarat Development Project  
Ahmedabad
9. Shri Natubhai Shah  
Editor, Van Sandesh Weekly  
Shramic Vikas Sangathan  
Vadodara
10. Shri Balmukund Mistry  
District Project Officer, Bharuch
11. Shri Badribhai Joshi  
Leading Social Worker, Tanachha  
Bharuch
12. Shri A.U. Vohra  
Activist and Editor Jan Chetna  
Sarkly Road, Ahmedabad
13. Shri V.R. Raval  
Regional Officer,  
Gujarat Pollution Control Board,  
Bharuch
14. Shri M.V. Patel  
Dy. Engineer,  
Gujarat Pollution Control Board,  
Bharuch
15. Shri Ranchhodbhai Shah  
Principal, Amity High School,  
Bharuch
16. Dr. Bhaskar Rawal  
Professor of Chemistry  
Narmada Science College, Bharuch
17. Shri Bhikhabhai G. Patel  
Farm Leader, Village Bori, Bharuch
18. Mr. Rushi Dave  
Reporter, Indian Express, Bharuch
19. Mr. V.N. Gharia  
Principal, Narayan Vidyalaya  
Bharuch
20. Mr. Narendra Shah  
President, Junior Chamber, Bharuch
21. Mr. S.D. Panchal,  
Land and Estate Developer,  
Bharuch

**District Level Meeting on  
Water and Sanitation  
at Himmatnagar on 29.4.1997**

1. Shri Dilipsinh Parmar, MLA, Modasa
2. Smt. Jayanti Ravi, I.A.S., District Development Officer, Sabarkantha Jilla Panchayat
3. Prof. Gokul O. Parikh, Sardar Patel Institute of Economic & Social Research, Ahmedabad
4. Shri Ratibhai, Chairman, Jilla Panchayat Bandhkam Samiti
5. Shri G.A. Oza, Deputy, D.D.O., Sabarkantha, Jilla Panchayat.
6. Shri D.M. Prajapati, Executive Engineer, Sabarkantha Irrigation Dept.
7. Shri G.S. Patel, Executive Engineer, Sabarkantha, Roads & Buildings Department.
8. Shri C.M. Patel, Deputy Executive Engineer, Irrigation Dept., Himmatnagar
9. Shri K.L. Vaghela, Mahila Samkhyas Society, Himmatnagar.
10. Smt. Kokila S. Patel, Co-ordinator, ENARDE Foundation, Himmatnagar.
11. Shri S.S. Patel, Zonal Co-ordinator, ENARDE Foundation
12. Shri C.G. Rayal, Taluka Development Officer, Himmatnagar
13. Shri N.C. Patel, Jilla Vikas Agency, Sabarkantha
14. Shri M.H. Patel, Asst. Project Administrator (Agriculture) ITDP.
15. Shri S.A. Patel, Executive Engineer, PWD Division-1, Himmatnagar.
16. Shri R.N. Patel, Executive Engineer,

Mazam Dam Canal Division, Modasa.

17. Shri N.P. Patel, Executive Engineer (Civil) GWSSB, Himmatnagar
18. Shri P.S. Solanki, Executive Engineer (P H Division), GWSSB, Himmatnagar

**District Level Meeting on  
Agriculture  
held at Vallabh Vidyanagar  
on April 5, 1997**

1. Mahendrabhai Kashibhai Patel  
Purnima Chowk  
ODE TA. Anand,  
Dist. Kheda-388 120
2. Patel Naranbhai Zaverbhai  
At. PO Sheeli, Ta. Anand,  
Dist. Kheda
3. Chimanbhai Amabajal Patel  
Anand
4. Ramanbhai Ambalal Patel  
At & PO Arera  
Ta. NADIAD, Dist. Kheda
5. Naranbhai R. Patel  
12, Mangalam Park  
Borsad Road,  
Ahmedabad-388 001
6. Patel Rajnikant Umedbhai  
At & PO Bedva  
Ta. Anand, District Kheda-388 320
7. Gunvantbhai R. Patel  
At & PO SARSA  
Ta. Anand, Dist. Kheda
8. Shri Rameshbhai M. Patel  
Chairman, Amul Dairy  
Anand-388001
9. Rajendrasinh Prabhatsinh Raolji  
At & PO Bhadarva  
Ta. Savli, Dist. Baroda
10. Mahida Devendrasinh Bhagvan  
At & Po Bhadarva  
Ta. Savli, Dist. Baroda
11. Pravinsinh F. Raulji  
At & Po Bhadarva  
Ta. Savli, Dist. Baroda.

- |                                                                                                                                 |                                                                                                      |
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| 12 Patel Ratilal Somabhai<br>At & PO Bedva, Ta. Anand, Dist.<br>Kheda-388320                                                    | 26 Dr. Kanubhai Mehta, Dy. Director<br>Guj. Agri. University,<br>Anand-388 001                       |
| 13 Deepak Chhotabhai Patel<br>Mahadev Khadki<br>At & PO Lambhvel<br>Ta. Anand, Dist. Kheda-387 310                              | 27 Dr. K.P. Patel<br>Associate Research Scientist<br>Guj. Agri. University, Anand-388 001            |
| 14 Dr. B. H. Patel<br>Anugrah Cold Storage, Chaklashi<br>Ta. Anand; Dist. Kheda                                                 | 28 Dr. J.G. Patel<br>Guj. Agri. University, Anand-388 001                                            |
| 15 Patel Ashokbhai Ishwarbhai<br>Undi Falia, Lambhvel<br>Ta. Anand, Dist. Kheda                                                 | 29 Dr. Mahesh Pathak, Hon. Director<br>Agro Economic Research Centre<br>Vallabh Vidyanagar           |
| 16 Dr. A. G. Dixit<br>Dist. Agriculture Officer<br>Dist. Panchayat, Kheda, Nadiad                                               | 30 Dr. Rajashree Dutta<br>Agro-Economic Research Centre<br>Vallabh Vidyanagar                        |
| 17 R.C. Desai<br>Ex-Principal<br>B&B Polytechnic, Vallabh<br>Vidyanagar                                                         | 31 V.D. Shah<br>Research Officer<br>Agro-Economic Research Centre<br>Vallabh Vidyanagar              |
| 18 Dr. C.K. Bhatt<br>Ex-Principal<br>N.S. Patel Arts College, Anand-388<br>001                                                  | 32 Dr. J.N. Pandya, Reader<br>Dept. of Economics<br>Sardar Patel University<br>Vallabh Vidyanagar    |
| 19 Mr. O.T. Gulati<br>Chief Engineer<br>Irrigation Dept., Gandhinagar                                                           | 33 Dr. A.S. Patel<br>Professor & Head<br>Dept. of Economics<br>SP University, Vallabh Vidyanagar     |
| 20 Dr. Manubhai F. Patel<br>Former Professor & Head<br>Department of Sociology<br>Sardar Patel University<br>Vallabh Vidyanagar | 34 Dr. Himmat Patel,<br>Professor, Dept. of Economics<br>SP University, Vallabh Vidyanagar           |
| 21 L.M. Chothani, Manager (Agri.)<br>Bank of Baroda, Amul Dairy Road,<br>Anand-388 001                                          | 35 Shri N.B. Parmar<br>Lecturer, Commerce College<br>Vallabh Vidyanagar                              |
| 22 Dr. R.M. Patel<br>Former Campus Director<br>Former Vice-Chancellor<br>SP University, Vallabh Vidyanagar                      | 36 Dr. P.K. Singh, Professor<br>Dept. of Economics<br>Sardar Patel University,<br>Vallabh Vidyanagar |
| 23 Dr. Katarsingh, Director<br>IRMA, Anand-388 001                                                                              | 37 Dr. S.K. Patel, Reader<br>Dept. of Economics,<br>SP University, Vallabh Vidyanagar                |
| 24 Dr. D.J. Patel, Professor & Head<br>Dept. of Namatology<br>Guj. Agri. Univ. Campus, Anand.                                   | 38 Dr. H.F. Patel, Reader,<br>Deptt. of Economics,<br>SP University, Vallabh Vidyanagar              |
| 25 Dr. J.R. Patel, Prof. & Head<br>Dept. of Entomology,<br>Guj. Agri. University, Anand-388 001                                 | 39 Dr. H.P. Trivedi, Reader,<br>Deptt. of Economics,<br>SP University, Vallabh Vidyanagar            |
|                                                                                                                                 | 40 Dr. Nandaben Patel, Lecturer<br>Deptt. of Economics<br>SP University, Vallabh Vidyanagar          |

- 41 Dr. Anil Sisodia, Lecturer  
Deptt. of Economics  
SP University, Vallabh Vidyanagar
- 42 Shri Mohan Patel, Lecturer  
Dept. of Economics  
SP University, Vallabh Vidyanagar
- 43 Shri Gopal Mach  
Research Assistant, Dept. of  
Economics  
SP University, Vallabh Vidyanagar
- 44 Dr. K D. Shah  
Principal, N.S. Patel College  
Vallabh Vidyanagar
- 45 Dr. Shantibhai Patel, Reader  
Dept. of Physics  
SP University, Vallabh Vidyanagar

**District Level Meeting on  
Industrialisation  
held at Baroda on June 7, 1997**

1. Shri Rakesh Agrawal, President,  
Federation of Gujarat Industries.
2. Shri Amit Goradia,  
Sr. Vice President,  
Federation of Gujarat Industries.
3. Shri S.S. Chawla, Vice President,  
Federation of Gujarat Industries.
4. Shri Ram Devidayal, Hon. Treasurer,  
Federation of Gujarat Industries.
5. Shri V.M. Mehta, Member,  
Managing Committee,  
Federation of Gujarat Industries.
6. Shri P.J. Baxi, Member,  
Managing Committee,  
Federation of Gujarat Industries.
7. Shri Ajit Kapadia, Member,  
Managing Committee,  
Federation of Gujarat Industries.
8. Shri Ranjan Munshi, Secretary  
General, Federation of Gujarat  
Industries.
9. Dr. R.J. Mody,  
Sardar Patel Institute of Economic &  
Social Research, Ahmedabad.

**District Level Meeting on  
Industrialization  
at Rajkot on 5.4.97**

1. Dr. H.M. Joshi,  
Vice-Chancellor
2. Dr. B.M. Jani  
Economics Dept.  
Saurashtra University, Rajkot
3. Mr. H.D. Parmar,  
Lead Bank Officer
4. Mr. Hirabhai Manek,  
Chamber of Commerce,  
Rajkot
5. Mr. Vajubhai Mavani,  
President, Rajkot Engg. Association
6. Mr. D. P. Buch,  
Regional Manager, GSFC
7. Mr. Vasudev Vora,  
Hind-warj NGO
8. Mr. Mahesh V. Joshi,  
Director, D.R.D.A.
9. Mr. N.G. Vaghela  
Joint Commissioner,  
Dist. Industries Centre
10. Branch Manager  
Agakhan Trust
11. Mr. F.P. Halani  
Dy. Collector & Dist. Planning  
Officer, Rajkot.
12. Dr. Meenaxi Patel
13. Mr. Joshipura, B.S.  
Manager / Technical, D.I.C. Rajkot.
14. Mr. B.M. Oza, Manager,  
Economic Investigation, D.I.C.,  
Rajkot.
15. Mr. K. H. Kansagara  
Guj. Pollution Board, Rajkot
16. Mr. N.J. Desai  
Dy. D.D.O., Rajkot
17. Mr. V.P. Patel  
Vice-President,  
Rajkot Engg. Association
18. Mr. Hakishore Barchha  
Industrialist,  
Ashok Metal Industry, Rajkot

19. Mr. Hasubhai Dave, Advocate  
President,  
Kutch Saurashtra Productivity  
Council.
20. Mr. D. N. Pandit, Joint Director  
Animal Husbandry Office, Rajkot.
21. Mr. P.B. Zala  
Dist. Animal Husbandry Officer,  
Rajkot.
22. Mr. S.M. Virani  
Supdt. Engineering, Irrigation,  
Rajkot.
23. Mr. T.L. Shukla  
Asst. Information Officer,  
Dist. Information office
24. Mr. Neelkanth Jani  
Centre for Entrepreneurship  
Development, Rajkot.
25. Mr. J. N. Mankad  
G.I.I.C. Rajkot office.
26. Mr. H.K. Parmar  
Dist. Statistical Officer  
District Panchayat, Rajkot.
27. Dr. H.J. Thora
28. Dr. G.C. Trivedi  
Asstt. Director,  
Animal Husbandry, Rajkot
29. Mr. A.P. Patel  
Research Asstt., Statistics Office,  
District Panchayat, Rajkot.
30. Mr. Vazir Vallani  
Agakhan Trust, Rajkot.
31. Mr. G.K. Joshi  
Research Officer, Dist. Planning  
Office.
32. Ms. Maneesha Brahmbhatt  
Mahila Suraksha Committee
33. Prin R.B. Hapani  
Rajkot Engg. College, Rajkot
34. Mr. H.B. Bhojani  
Rajkot Engg. Association
35. Mr. Subhash Thalwani  
Industrialist, Rajkot.
36. Mr. C.R. Koradia  
Manager, G.S.F.C. Rajkot.
37. Mr. Allice Lewis  
President Rotary Club of Rajkot.

38. Mr. A.V. Rammaih  
AGM, Union Bank of India
39. Mr. S. J. Kalaria  
State Bank of Saurashtra  
Training Centre, Rajkot.
40. Mr. Y.A. Trivedi  
Dept. of Fisheries, Rajkot
41. Mr. Mukesh Pandya  
Deputy Collector, Training.
42. Dr. P.G. Maravania  
Deptt. of Economics  
Saurashtra University, Rajkot.
43. Dr. Meenaxiben Patel  
Deptt. of Economics  
Saurashtra University, Rajkot.
44. Ms. Jyotiben Nayak  
Deptt. of Economics  
Saurashtra University, Rajkot.
45. Mr. R.P. Patel  
Deptt. of Economics  
Saurashtra University, Rajkot.

**District Level Meeting on  
Child Health & Nutrition  
held at Amreli on April 9, 1997**

1. Dr. S.R. Dave
2. Mr. Vyas, Health Officer
3. Principal, Ms. Naliniben Maheta
4. Shri Dineshbhai Vithalani
5. Dr. A.J. Dabavala
6. Shri Khodidasbhai Thakker
7. Shri Rasikbhai Chandrana
8. Mr. Vaghela, Planning Officer
9. Shri Kishorbhai Dave
10. Shri Jasubhai Kanalar
11. Shri Lalitbhai Maheta
12. Principal, Shri Hirabhai Shah
13. Dr. Kapilaben Bhatt
14. Shri Umeshbhai Joshi
15. Shri Sureshbhai Vyas, Manager,  
BOB
16. Shri Jitendrabhai Talaviya
17. Dr. Vasantbhai Parikh
18. Mr. Pandya, Social Defence Officer

- 19 Ms. Mitaben,  
Brahmakumari Vishwavidyalay
- 20 Shri Navalbhai Joshi
- 21 Shri Ghanshyambhai Parikh
- 22 Shri Jitubhai Masrani
- 23 Shri Kishorbhai Maheta
- 24 Prof. Piyushbhai Sanghani
- 25 Shri Dilashadbhai Shekh
- 26 Ms. Kumudben Kanabar
- 27 Shri Bipinbhai Gandhi
- 28 Ms. Gulashanben Mithani
- 29 Information Officer,  
Shri Bharatbhai Basiya
- 30 Principal, N.K. Trivedi
- 31 Ms Jyotsnaben Mithani
- 32 Shri Rajeshbhai Parikh
- 33 Ms Sulekhaben Maheta
- 34 Shri Aravindbhai Pathak
- 35 Dr. Vathalani
- 36 Ms. Mitaben Sanghani
- 37 Shri Sureshbhai Joshi

**District Level Meeting held on  
Infrastructure  
at Mehsana on 5.5.97**

1. Shri Jaynarayan Vyas,  
Member of Assembly,  
Taluka. Sidhpur, Mehsana,  
"SAKET", Nr.Narayanpura Rly  
Crossing, Ahmedabad.
2. Shri Motibhai Chaudhari, Chairman,  
Dudhsagar Dairy, Mehsana
3. Shri Kantibhai L. Patel,  
109, GIDC-2
4. Shri G.K. Patel,  
President Dediyaan Ind. Estate  
Asso.  
Mehsana
5. Shri Somabhai Karsanbhai Patel  
President, Taluka Panchayat,  
Sidhpur
6. Shri Kantilal Keshavlal Patel  
Head, Politics/Defence Studies  
Dept.

- Municipal Arts & Science College,  
Mehsana
7. Shri A.S. Parekh  
Chief Engineer, GE Board, Uttar  
Zone Mehsana
8. Shri Patel Madhurbhai Manilal  
Suptt. Engineer, GE Board, Visnagar  
Road, Mehsana
9. Shri Patel Dalabhai Galabhai  
Principal, K.M. Kothari High School,  
Satlasana, Kheralu
- 10 Shri Chaudhari Dalajibhai  
Shamajibhai, Social Worker, Post  
Vaghvadi, Ta. Kheralu, Mehsana
- 11 Shri Patel Mohanbhai Karsandas,  
President Sidhpur Taluka,  
Sarpanch Kokosi Village
- 12 Shri Prahaladbhai Joitaram Patel  
Secretary, Dharti Parivar, Mehsana
- 13 Dr. Rajabhai Patel, Social Worker,  
19/A Harinagar Soc., Mehsana
- 14 Shri Ramubhai Chimanlal Patel  
Sarvodaya Ashram Madhhi  
Gramodyog, Vadi, Vijapur, Mehsana
- 15 Shri Bholabhai Chaturbhai Patel,  
President,  
Visnagar Nagrik Co.op. Bank,  
Visnagar, Mehsana
- 16 Shri Ramajibhai Savajibhai  
Chaudhari  
Ex-Chairman, Dist. Oilseed Cop.op  
Sangh, Visnagar, Mehsana
- 17 Shri Karshanbhai Lilabhai Desai,  
Gandhi Ashram Zilla, Mehsana
- 18 Shri Ishwarbhai Shivabhai Patel,  
Vice President, Gujarat Sarvoday  
Mandal, Grambharati, Amarpur,  
Mehsana
- 19 Shri Vikrambhai D. Patel, Sidhpur,  
Vice Chairman, Dudh Sagar Dairy,  
Mehsana
- 20 Shri Keshavlal V. Patel, Chairman,  
Mehsana Agro, S.T. Road, Sidhpur
- 21 Shri Ivashanker V. Trivedi,  
Ex-chairman, Land Dev. Bank,  
Mehsana

22. Shri Rikhavdas Shah  
Social Worker, Ex-President Dist.  
Panchayat, Mehsana
23. Dr. J.V. Shah, SPIESR, Ahmedabad
24. Dr. P.A. Amin, SPIESR, Ahmedabad

**District Level Meeting on  
Women and Empowerment  
held on 13.4.1997 at Bhavnagar**

1. Vivekanand Gramodhyog Society
2. Shri C.R. Bhatt,  
Centre Muktalaxmi Mahila Vidyalay  
Campus, Bhavnagar
3. Shri R.D. Gardi,  
Bhavnagar Women Education  
Mandal  
Smt. Ila Trivedi Diamond Chowk  
Bhavnagar
4. Smt. Induben Dhirajlal Mahila  
Mandal, Paliyad Road, Botad.
5. Smt. Leelaben Kapasi  
Bhagini Mitra Mandal,  
Palitana
6. Smt. Nimuben Sheth  
Bhagini Seva Mandal, Savarkundla
7. Smt. Madhuben Pravindas Agravat  
Shakti Mahila Group, Ramaji Temple  
Campus, Bhavnagar
8. Darpan Cheritable Trust  
Managing Trustee, Parsivalpra,  
Bhavnagar
9. Sardar Snatak Mandal  
Dr. Rameshbhai Mendapara Nanku  
Tails  
Nr. Pathika Ashram, Bhavnagar
10. Yuvak Seva Trust  
Trivedi Vishnubhai, Bhavnagar
11. Shri Prafulbhai Trivedi  
"Janpath" 10, Sahajanand Tower,  
Ahmedabad-51
12. Smt. Rekhaben Patel  
District Rural Development Agency  
Nr. Income Tax Office, Bhavnagar
13. Shri Rameshbhai Vaghela  
Nehru Yuva Kendra, Bhavnagar

14. Smt. Ivaben Mehta,  
Bhavnagar Mahila Sangh,  
Bhavnagar
15. Junagadh District Mahila Mandal  
Kadari Manzil Limda Chowk,  
Junagadh
16. Parishram Mahila Vikas Trust  
Kadari Manzil, Limda Chowk,  
Junagadh
17. Saipada Development Centre  
Matwa Chowk, Bhavnagar
18. Bhavnagar Mahila Mandal  
Bhanuben Mahila Chhatralay  
Chitaranjan Chowk, Bhavnagar
19. Shaishav Krushnakumar Sinh  
Akhata  
Behind Mahila College, Bhavnagar
20. Shri Jasakaran Gadhavi  
Smruti Trust, Palitana
21. Shri Panchasara Sonajibhai  
Shramik Vikas Sansthan, Moti  
Dharai
22. Shri Harkantbhai Desai  
Indian Social Welfare, Limdabi  
Chowk  
Bhavnagar
23. Smt. Manjuben Shah  
Vikas Gruh, Vidyanagar, Bhavnagar
24. Smt. Divyaben  
Ganpule Mahila Mandal  
Muni Chowk Shihor, Bhavnagar
25. Smt. Divyaben Pandya  
Mahuva, Bhavnagar
26. Smt. Arunaben Desai  
Kanya Vikas Vidhyal, Surendranagar
27. Anand Vatika Bhagini Mandal  
Nr. Parimal Chowk  
Bhavnagar
28. Smt. Jyotsnaben Pandya  
Member of Rural Village Panchayat,  
Vartej
29. Smt. Prafulben Mehta  
Mahila Seva Samaj, Bhavnagar
30. President, Mahila Utkarsh Trust  
Bhavnagar
31. Convenor, Women Study Centre  
Bhavnagar



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| <p>32 Secretary, Ilaben Pathak<br/>Ahmedabad Women Action Group,<br/>Ahmedabad</p> <p>33 Hon. Director, Shri Kirti Shah<br/>Ahmedabad Study Action Group<br/>Ahmedabad</p> <p>34 Chairman, Dr. Nimaben Acharya<br/>Gujarat Mahila Arthik Vikas Nigam<br/>Ahmedabad</p> <p>35 Dr. Ushaben Kankere<br/>Professor Sociology,<br/>3 Professors' Colony, Ahmedabad</p> <p>36 Smt. Jayshriben Joshi<br/>Isar, A/3/1-2 Sahjanand Tower,<br/>Ahmedabad</p> <p>37 Dr. Amrapali Merchant<br/>Professor &amp; Head<br/>SP University, Vallabh Vidyanagar</p> <p>38 President<br/>Gujarat Uni. Women Association<br/>Vasundhara Society, Ahmedabad</p> <p>39. Gujarat Kalavani Trust<br/>S.V. College Compound,<br/>Ahmedabad</p> <p>40 Dr. Indiraben Hirway<br/>Gandhi Labour Institute, Ahmedabad</p> <p>41 Smt. Meera Chatterji<br/>SEVA, Ahmedabad</p> <p>42 Smt. Belaben Trivedi<br/>Commu. Mahila Bal Vikas<br/>Ahmedabad</p> <p>43 Dr. Shantaben Chawda<br/>Dasi Jivanpara, Rajkot</p> <p>44 Smt. Vasuben Bhatt<br/>Gujarat Mahila Federation<br/>Ahmedabad</p> <p>45 Smt. Jagrutiben Vyas, Chairman,<br/>Gujarat State Social Welfare<br/>Ahmedabad</p> <p>46 Ms. Rekhaben Patel<br/>Rural Development Agency,<br/>Bhavnagar</p> <p>47 Manager, Samaj Seva State Bank<br/>Bhavnagar</p> <p>48 Manager,<br/>District Indu. Centre Vidyanagar<br/>Bhavnagar</p> | <p>49 Officer, U.C.D. Dept.<br/>Municipal Corporation, Bhavnagar</p> <p>50 Director, DRDA, Bhavnagar</p> <p>51 Collector, Bhavnagar</p> <p>52 Dist. Development Officer<br/>Bhavnagar</p> <p>53 Mayor,<br/>Bhavnagar Municipal corporation<br/>Bhavnagar</p> <p>54 Dist. Planning Officer<br/>Bhavnagar</p> <p>55 Principal, N.A. Gandhi Mahila<br/>College<br/>Bhavnagar</p> <p>56 President<br/>Bhavnagar District Panchayat<br/>Bhavnagar</p> <p>57 Principal, Kapadia Mahila College<br/>Bhavnagar</p> <p>58 Dr. Purnima Mahila<br/>Head, English Bhavan, Bhavnagar</p> <p>59 Dr. Ushaben Vyas<br/>Shamaldas College, Bhavnagar</p> <p>60 Dr. Ramanik Bhatti<br/>Head, Sociology, Bhavnagar</p> |
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**District Level Meeting on  
Culture & Heritage  
held at Jamnagar on April 6, 1997**

1. Shri G.C. Murmu, Collector,  
Jamnagar
2. Shri Majoj Agarwal, DDO, Jamnagar
3. Shri Ajaykumar Tomar, DSP,  
Jamnagar
4. Shri SMF Bukhari, Commissioner  
Jam. Mun. Corporation
5. DEO, Jamnagar
6. District Education Office, Jamnagar  
Dist. Panchayat
7. Social Welfare Office, Jamnagar
8. Chairman,  
Cultural Activities Committee,  
Jamnagar Mun. Corporation
9. Dy. Forest Conservation Officer  
Social Afforestation, Jamnagar

- 10 Forest Conservation Officer  
Jamnagar
- 11 All members, INTEC,  
Jamnagar Chapter
- 12 President, Lion Club, Jamnagar
- 13 President, Rotary Club, Jamnagar
- 14 President, Jesis, Jamnagar
- 15 Shri Mangalsinh Jadeja  
Giants International, Jamnagar
- 16 President, Youth Hostel, Jamnagar
- 17 President, Jain Social Group,  
Jamnagar
- 18 President,  
Nehru Youth Centre, Jamnagar
- 19 Curator,  
Archaeology Deptt., Jamnagar
- 20 Shri Bhatnagar,  
Nritya Bharati, Jamnagar
- 21 Principal, Doshi Mahila College  
Jamnagar
- 22 Prof. H.B. Sheth  
Head of Eco. Dept.  
Doshi Mahila College, Jamnagar
- 23 Prof. M.J. Purohit  
Economic Dept.  
Award Winner of Best NSS Officer  
Doshi Mahila College, Jamnagar
- 24 Prof. Vasuben Trivedi  
Head of Home Science Dept.  
Senator, Saurashtra University  
Leading Women Worker  
Ex-chairperson, Uni. Granth Nirman  
Board, Ahmedabad
- 25 Principal  
D.K.V. Arts Sc. College  
Jamnagar
- 26 Prof. K.J. Ajabiga  
Retired Professor of Sanskrit  
and Scholar of Indian Culture
- 27 Principal, M.P.S Shah Commerce.  
College, Jamnagar

**District Level Meeting on  
Modernisation of the Government  
held at Gandhinagar on April 28, 1997**

1. Shri V.R.S. Cowlagi  
ACS, Health & Food Dept.
2. Shri K.N. Shelat  
Com. of Emp. & Trg.
3. Shri K.P. Yagnik  
Retd. Secretary to Govt. E.D.
4. Shri K.M. Panchal  
Additional Secretary  
Gujarat Vidhan Sabha
5. Shri Bhagyesh Jha  
ED, IndexB & A/c (D)
6. Shri Mahendra T. Desai  
Prof. and Head,  
Dept. of Political Science  
Gujarat University
7. Shri Kaushik S. Patu  
NGO
8. Shri C.L. Vyas,  
Medhavi NGO, Ahmedabad
9. Shri Uttana Mevada, Information  
Office
10. Shri M.K. Shukla  
President, Gandhinagar, Jr.  
Chamber (NGO)

**District Level Meeting on  
Global Resources for Gujarat  
held at Ahmedabad on May 1, 1997**

1. Dr. P.K. Das, Director General, GLI
2. Prof. Indira Hirway, GLI
3. Dr. B.B. Patel, GLI
4. Dr. I.S. Singh, GLI
5. Mrs. Geeta Lal, GLI
6. Mrs. Laxmiben Solanki, GLI
7. Dr. R.J. Mody, Director, SPIESR
8. Dr. S.P. Kashyap, SPIESR
9. Prof. Rohit Shukla, SPIESR
10. Dr. Rohit Desai, SPIESR
11. Dr. Jayshree Shah, SPIESR
12. Shri S.K. Mahapatra, IAS,  
Govt. of Gujarat

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**District Level Meeting on  
Employment  
held at Valsad on 10.4.1997**

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Dist. Planning Board, Collector  
Office, Valsad
- 20 Nikhilesh Upadhyay  
Information, Valsad
- 21 M.J. Parmar, Manager (Credit)  
District Industries Centre, Valsad
- 22 P.E. Paralikal, Manager  
Central Bank of India, Valsad

**District Level Meeting on  
Poverty Alleviation**

**held at Banaskantha on April 19, 1997.**

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