

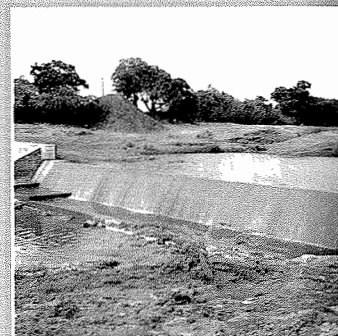
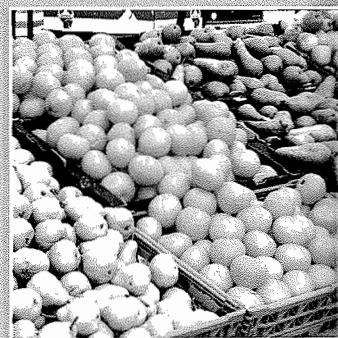


सत्य मेव जयते  
Government of Gujarat

Speech of  
Shri Narendra Modi  
Chief Minister of Gujarat

53<sup>rd</sup> meeting of  
National Development Council

New Delhi  
29<sup>th</sup> May, 2007





Hon. Prime Minister, Hon'ble Union Ministers, Deputy Chairman of the Planning Commission, fellow Chief Ministers, Ladies and Gentlemen

We have assembled today in this august forum at a critical juncture of the economic history of the nation. What we deliberate and conclude today would determine, to a great extent, the position India will obtain in the global economy. We determined in the 52nd NDC meeting, Mr. Chairman, that a 4.1% growth rate in agriculture sector is essential in order to achieve a 9% overall growth rate of GDP of India during 11<sup>th</sup> Plan period. We are acutely conscious of the fact that this is a formidable endeavor. **Such extra-ordinary achievement cannot be made through ordinary decisions. Since the time of Green Revolution, the management and the practices of the agriculture sector have not changed in any extra-ordinary manner.** A complete process re-engineering and re-structuring of the governance of agriculture therefore needs to be carried out in this sector because the existing practices have failed to deliver desired results.

The report of the NDC Sub-Committee which has been presented today prescribes solutions to many issues that afflict this sector. The broad solutions indicated in the report need to be converted into specific but flexible policies and programmes. The growth rates we may obtain will test the degree of success of these policy prescriptions. It is with this in mind and with utmost seriousness for the purpose that we need to approach these issues.

### Need for increasing public investment in the area of Agriculture

It is beyond doubt that the public investments in the agriculture sector have come down substantially signaling the acute need to increase the same immediately. Conscious of this need, Gujarat has been consistently increasing the plan outlay in this sector. For example, a major jump of more than 20% has been effected for the agriculture sector in the very first year of the 11<sup>th</sup> Five Year Plan with added emphasis on horti culture, land development and water harvesting structures. Gujarat also spends more than 30% of its outlay on irrigation and water resources as roughly 65% of our cultivable area is unirrigated. Repeated petitions to Union Government to extend special assistance to this sector of Gujarat has elicited no response favourable to the State. We have been pleading to treat Sardar Sarovar Project as a project of national importance but to no avail.

There is need to raise outlay on research areas identified on the basis of agro climatic farming conditions; on research related to capacity building as also research on inputs needs of poorer farmers. However, **it would not be appropriate for the NDC to leave the onus for this at the door steps of the States. In view of the fact that more than 70% of the tax and non tax revenues collected for**

**exchequer in the country by all Governments together go in the kitty of Union Government it cannot be said that the investments in this area be increased by the States as this is a State subject. State subjects having strategic national interest do need to be funded by Central Government** and preferably as per the specific requirements of each State in view of this skewed distribution of revenues between States and Centre.

As such it is strongly recommended that demand based and incentivised grants be made as ACA to the States so as to enable the public investment specifically in the area required by each State severally.

### Capacity Building of the Farmer to increase Agriculture Productivity

While the policies evolved on the basis of today's recommendations may be technically sound, the desired results may not be achieved if enough attention is not paid to the question of capacity building of the key players in this sector including the farmer. Not many recognize the fact that **agriculture partakes characteristics of capital intensive, high technology, high risk business, but has virtually no effective programme of capacity building of the farmer.** The report should have placed greater emphasis on this aspect of agriculture. It is in this context that knowledge deficit is the main constraint in agriculture productivity. There is a need to create a district level forum where progressive farmers, scientists and agriculture department should be brought together. This will redesign agriculture research making it relevant at farm level.

At the heart of productivity, we feel the need to transfer the expert knowledge to the farmers. Gujarat has taken the initiative to celebrate **Krushi Mahotsav** every year to communicate with farmers regarding the strategies to increase agriculture productivity which has yielded good results. In this 30-day mass contact campaign, which may also be called **contact farming** in a way, the package of transfer of knowledge is pegged to productivity. It mainly focuses on soil analysis, cropping and intercropping advice based on this analysis, replenishing soil fertility based on the analysis of its chemical properties including micronutrients, advisories on correct ratio of nitrogenous, potassic and phosphoric fertilizers, adoption of micro irrigation and advice on adoption of not only certified and high yielding varieties but also the right quantity per hectare. Further, scientific pest management including popularization of bio agents for the purpose, importance of farm gate value addition to get higher price and linking in market information in cropping decisions are also the areas included in knowledge transfer. During last three years, in this month long mass extension campaigns, state agriculture university scientists, PG students and experts from the departments go and visit farmers to impart scientific knowledge, advice as also give guidance on specific problems of the villages. Veterinary officers also accompany not only to offer advice but also to ensure 100% vaccination of animals. This "Lab-to-Land" project has helped the farmers significantly. Some of the achievements of the Krushi Mahotsava made during 30 days during each of last three years are given below:

| Scheme  | Krushī Mahotsava<br>2005 | Krushī Mahotsava<br>2006 | Krushī Mahotsava<br>2007 |
|---|--------------------------|--------------------------|--------------------------|
| Free Agriculture Kit<br>(BFL farmers)         | 90,770                   | 1,42,711                 | 1,38,523                 |
| Free Horticulture Kit<br>(BFL farmers)        | 90,592                   | 1,36,773                 | 1,31,075                 |
| Free Animal<br>Husbandry Kit<br>(BFL farmers) | 90,533                   | 1,00,000                 | 3,29,151                 |
| Free Soil Health Card<br>(Farmers)            | 9,52,075                 | 2,35,426                 | 1,14,927                 |
| New Soil Samples<br>taken                     | 5,45,609                 | 1,02,050                 | 91,779                   |
| Animal Vaccination<br>(animals)               | 43,86,086                | 48,81,049                | 54,96,317                |

The Agriculture kits as shown above are given free of cost only to the BPL farmers as a measure of the inclusive growth model of agricultural development in Gujarat.

**We should also think of introducing agriculture related subject in the primary and higher secondary schools located in rural areas.**

### Gender Specific Capacity Building

Women traditionally make huge direct contribution to agriculture sector not only in productive processes but also in augmenting incomes through other related activities. **Tradition has perfected them alone for a number of activities in the value chain of agriculture.** Their involvement can be

formalized and made financially self sustainable if they are trained formally with application of technology, either individually or through self help groups, for various activities in the value chain, from crop husbandry to harvesting, to value addition and sales.

### Scheme for women empowerment in horticulture

Development of horticulture requires fruits and vegetable preservation. In Gujarat, 18 community canning and kitchen gardening centres have been established along with the 17 mobile centres to train women in the low cost technology for preservation of fruit and vegetables. The programme provides 15 days and 7 days short term training classes at the centre as well as in rural areas. This is a part of self sustaining capacity building programme aimed at empowerment in terms of self employment.

### Scheme for training women in agriculture

Department of Agriculture gives training to the women farmers in 17 Farmers Training Centres established in the State. The training programme lasts for 5 days in-house training including exposure to field demonstration and study tour. It provides detailed training at crop cultivation practices, animal husbandry, horticulture, dairying etc.

### Agriculture and Rural Economy

Rural economy in India ought to be visualized in terms of following three parameters

- (1) modernization of agriculture
- (2) agro-forestry
- (3) Animal Husbandry and fisheries

To **modernize Agriculture** we have to bring together following 5 essential elements (panch tatvas)

- (i) Progressive farmer
- (ii) Agro Scientist
- (iii) Agricultural Extension
- (iv) Agro Technologist
- (v) Agro Economist

Micro level coordination of these panch tatvas alone can drive the farming to revolution in agricultural research.



**Tree cultivation** constitutes the intrinsic strength of the rural economy. Trees planted in the farming areas on perpetual basis provide a permanent cycle of income to the farmer. The emphasis on this aspect of farming has got diluted. The trees in the farming areas provide economic sustenance in multifarious ways which requires to be studied as additional source of sustenance of farming community.

## Agro-Technology

We have seen very little evolution in the field of Agro-Technologies since the first Green Revolution. New technologies are needed for increasing Nation's food security and for the area under food grains to be increased. Use of agro-technology is also called for to improve productivity and to work out optimum use of irrigation water, diversification into high value/more remunerative crops.

Agricultural productivity can be improved further through use of high yielding and pest resistant varieties, transgenic technology, pest management through bio agents, low cost bio fertilizers, use of information technology for knowledge transfer and exchange of market information etc. This is required to be promoted by concerted efforts of all scientific institutions and Government departments.

Another area which needs attention is introducing agro technologies which are cost effective and integrated with local needs with easy adaptability. Low cost portable technology for soil analysis needs to be developed as it is the basis for input planning. These agro technologies should extend from farm level up to marketing stage. A scheme of incentives/disincentives should be worked out to optimize use of agricultural resources especially water, fertilizers and pesticides with special emphasis on indigenous farmer-invented technology in the nature of local solutions to local problems. Innovative use of agro-technology is essential to improve the productivity of agricultural labor. Such labor augmenting technology would improve output without displacing labour and with marginal capital input.

Post harvest technologies such as standardization, gradation, cold storage and logistics are of equal importance.

## Agro-Infrastructure

We have always talked of the Economic and Social Infrastructure. It is high time we identify Agro-Infrastructure as an area of special attention and emphasis.

It is customary to make recommendations on various components such as inputs, crop husbandry and management from micro economic point of view. It will be more strategic to look at agriculture as holistic infrastructure; essentially as a total supply chain, consisting of availability of agricultural inputs, management skills, access to scientific weather forecast and market intelligence including signals from global market. This agro infrastructure would also include water management systems, power and market logistics.



Rainwater harvesting structures including traditional step wells (known as Vav or Jal Mandir in Gujarat) at individual farm level, water resource management system and adoption of micro irrigation systems are some of the more specific water related components of the Agro-Infrastructure.

In Gujarat, we are using geo-physical information system based on satellite imagery, so that contour maps of villages are available to indicate best possible location for water storage structures such as check dams and watershed farm ponds. Under this 'Soil to Satellite' programme, CDs containing this GIS information have been distributed to different villages. The water use efficiency has rightly been emphasized by the NDC sub-committee. In Gujarat we took up a project of interlinking 42 river streams successfully which has resulted in recharging of wells. We therefore welcome the recommendation of the NDC subcommittee for inter linking rivers.

In Gujarat, using campaign mode, a large number of the rain harvest structures have been constructed with local participation. So far, 87,181 check dams and 1,71,400 farm ponds have been dug, 35,479 boribund (kutcha dams using sacs filled with earth) and 5358 village ponds and lakes have been deepened creating significant irrigation potential for rabi crop. This has enabled us to enlarge area under rabi crops from 22 lac ha in 2004 to 32 lac ha in 2006-7. To increase area under micro irrigation, we have set-up a special purpose vehicle called the Gujarat Green Revolution Company which is helping farmers in installing standard MIS. Financial assistance both in terms of subsidy and soft loan is being made available by this company to farmers. For more efficient use of surface water, Gujarat has already passed participatory irrigation management (PIM) Act.

### Reviving fertilizer industry

Fertilizer has been an important input in agriculture. Unfortunately the country is unable to produce required quantity of various fertilizers resulting in to need of import of these fertilizers. It is important to review the subsidy and pricing policy so as to enable Indian fertilizer Industry either to expand its capacity in a viable manner or to relocate its production capacity in the countries where cost of production is low in terms of power and raw materials. The Gujarat State Fertilizer Company which is a joint venture of Government of Gujarat is in process of establishing such a project in Tunisia.

At present, the fertilizer industry is ailing mainly due to inadequate return on investment. The return on investment in this sector is around 5% as against a return of 21% to 53% in Petrochemical, Oil & Gas, Cement, etc sectors. Therefore, it has not attracted any private sector investment for the last one decade. The situation is further aggravated due to in-adequate and irregular availability of feed stock like natural gas to the fertilizer industry. Inordinate delay in disbursement of subsidies due to inadequate provisions in the budget is yet another factor.

Therefore, suitable long term and transparent policies are needed for reviving the industry without further loss of time. Fresh investment in fertilizers sector is the need of the hour to meet the targeted growth in agriculture sector through increase in consumption of fertilizers.



## Agricultural Power

Power to agriculture has always been a sensitive subject particularly in power deficient state. We should explore the possibilities of power incentive for agricultural purposes where the farmers have continuously been increasing their productivity. Similarly we should also look at the possibility of special funds for incentive to those who specifically produce power for agricultural purposes. By separating electric feeder for agriculture under Jyotigram scheme, we have improved the quality of supply to agriculture and at the same time prevented power theft.

## Strengthening of co-operative credit structure and risk mitigation measures for farmers

Gujarat has already signed MOU with NABARD to implement revival package recommended by Vaidyanathan Committee to strengthen the cooperative credit structure. Although the Government of India announced interest subvention in order to make farm credit available at 7%, the request of the state for financial assistance to the DCCBs to compensate them for the additional cost of lending from own funds has not elicited favourable response.

## Disaster mitigation for Agriculture

It is droughts and floods which are gravest threats to agriculture in India. The extensive damage Gujarat suffered during last three years, immediately after the earthquake of 2001, was due to successive years of floods. Calamity Relief norms of the Government of India are antiquated to be useful instruments to mitigate the risk and cost of restoration. They need to be not only liberalized but also need to address state specific nature of calamities.

Insurance is a related subject for which we welcome the recommendation made by NDC sub-committee. While we welcome the recommendation of the NDC subcommittee to allow the state to design their own insurance model, it would be necessary that Government of India offers funds for infrastructure cost.

## Market Infrastructure and market risk

Strong market linkages promote higher productivity, diversification and quality produce in agriculture. While welcoming the recommendation to liberalize the rural markets, we would like to mention that Gujarat has recently amended its APMC Act. The amendment envisages introduction of private parties in the horticulture produce market and liberalization of access of exporters and processors to agricultural produce. The State also has a Scheme to offer financial support to APMC for modernization. It is to be noted that while higher production through higher productivity may be achieved, it is not much use unless market related risk are counterbalanced by more effective interventions so as to guarantee remunerative prices to farmers. As highlighted by Dr. Swaminathan, it is the income of farmers that should be at the heart of policy dispensation.



## Water Management and Irrigation

Central assistance needs to encourage schemes for water conservation and the minor irrigation schemes. Dove-tailing of Central and State subsidies so as to markedly reduce burden on the farmers/ beneficiaries will make programme as success.

Further the capacity utilization of the irrigation facilities created seldom goes above 60% of the design capacity. Plans are badly required to enhance utilization of irrigation potential, which inter-alia include command area development, extension of minor and sub-minor canals, participatory irrigation management, giving impetus to Micro Irrigation Systems (MIS) like Drip and Sprinkler Irrigation Systems. Giving incentives to better performing states on participatory irrigation management in Minor Irrigation Schemes may also be considered.

## Accelerated Irrigation Benefit Programme (AIBP)

Irrigation has always been a key factor as well as constraint in the growth of productivity in Indian agriculture. Apart from major and medium irrigation projects, minor irrigation schemes play a vital role for agriculture. The present AIBP policy does not provide for incentives to minor irrigation scheme (except for non-special category states with more than 50 Ha with preference of tribal area and Drought-prone areas). The laudable objectives envisaged in the report will only be achieved if minor irrigation schemes, having potential more than 50 Ha, are also made eligible for AIBP assistance and the current central assistance of 25% of project cost for Non-special category states be enhanced to 50%.

## Inclusion of Irrigation Assets under C.R.F.

The report rightly emphasizes the need for development of irrigation infrastructure and its maintenance as also ERM of old infrastructure. However, as we are all aware, recurrent floods play havoc with Irrigation assets.

The state is making huge investments in Major, Medium and Minor irrigation projects. Due to recurrence of heavy floods, these assets are damaged, thereby affecting its full utilization and productivity.

The Hon'ble Union Finance Minister in his Budget speech of February, 2006 has stated as follows:

"I am happy to report that the prospects for 2005-06 are just as good, if not better. This year can be characterized as the best of times and the worst of times. Nature has not been kind to us. Natural calamities took a heavy toll on human lives besides causing extensive damage to crops, roads, houses, and the infrastructure. Government provided immediate interim relief; this was followed by releases from the CRF and NCCF totalling Rs. 51 45.37 crore to date. Obviously, this assistance will not be enough.



The Planning Commission will draw up a programme for rebuilding the damaged infrastructure, and I wish to assure the House that the Government will provide the money for rehabilitation and reconstruction."

Unfortunately, in the last two years, we have not been able to make much headway in this direction and infrastructure damaged in the devastating floods of 2005 and 2006 has not been fully rehabilitated and reconstructed. In fact, permanent restoration of irrigation assets are not eligible for CRF assistance.

### Interlinking of rivers

The state has successfully linked the river Narmada to the rivers of Heran, Orsang, Karad, Mahi and Mohor, in Central Gujarat and Watrak, Sabarmati, Khari etc. in North Gujarat.

Similarly, the Sujlam-Sufyam Project nearing completion will shortly provide linkage of the river Mahi to Bhadar, Shedhi, Mohor, Dhamni etc. in Central Gujarat and Khari, Watrak, Sabarmati, Meshwc, Mazam, Rupe, Pushpavati, Saraswati and Banas in North Gujarat.

Besides the above, a few other interlinking works have already been started.

It is laudable that the NWDA has included study for intra basin transfer in its agenda. However, without central financing for these projects, not much headway can be expected.

### Revival of Step wells (Vav-Jal Mandir)

The Government of Gujarat has taken an innovative experiment of reviving the hundreds of historical and cultural ancient step-wells, which had proved a boon for centuries, under a project called 'Jal-Mandir'. This endeavor will help preserve our cultural heritage and will also be useful for storage of water and as means of ground water recharge.

### Participatory Irrigation Management (PIM)

Gujarat has been a pioneer in PIM and the approach paper of 11th Five year Plan specifically mentions the exemplary work done by the state in this field. The state has adopted a very unusual approach of involvement of farmers in canal management.

The state government has implemented PIM in more than one lakh hectare area by forming about 377 Water Users' Associations.

As per prevailing norms the main incentives are 20% rebate when WUA collects 100% water charges as administrative cost and 70% of the water charges to be retained by WUAs for routine maintenance of canals including minors, distributaries, branches and main canals and rehabilitation of the canal network at State Govt.'s cost before taking over.

The Gujarat Water Users' Participatory Irrigation Management Bill - 2007 has been enacted recently.

The State Government has set a short term target of an additional 4 lakh hectare for this year and a long term target of 15 Lakh Ha. including Sardar Sarovar Project for three years for inclusion in PIM.

As great emphasis is given to implement PIM on a large scale in this report, there should be special assistance for the projects to be covered under PIM. The present assistance is too meager to result in large scale success. To achieve the goals listed in the approach paper/ report, the assistance of the Central Government needs to be substantially increased.

### Pioneer States to be Given Incentive Grant

I have narrated some of the successful models already completed or initiated by my state.

It is experienced that these models are being taken up for replication at all India level, which is very welcome. However, by the time projects are taken up and a scheme of central assistance is finalized, proactive states complete all or most of their possible projects. It needs to be appreciated that this can only be done by diversion of funds from other sources and the states not benefiting from subsequent schemes are badly hurt.

In view of the above, I suggest that incentive funds should be provided to the states and the states be free to use these on 3 to 4 items that are most needed to improve irrigation assets as we will all agree that the needs vary from state to state.

### Organic Farming

We need to structure organic farming on scientific and professional lines and establish global linkages. Simultaneously the production is to be marketed with good marketing strategy to tap the increasing global demand for organic food.

The global demand for organic food is expanding at a very fast pace. India is traditionally very strong base for organic farming because it is rooted in our traditional rural economic culture. Men and women in farming communities have traditional division of duties to carry out organic farming effectively. What is required now is to structure this practice on scientific and professional lines and establish global linkages. We need to adopt a special strategy for the coming five years to raise India's capacity in this field to fulfill large portion of global requirement and acquire a significant share in the global market. This would however require the following:

(a) Certification

The organic product needs to be certified by an agency of repute having capacity in testing and research on organic product.



#### (b) Standardization

An ISO level standardization institution would be required to be set up to make the products acceptable in global market.

#### (c) Marketing

The organic production of the country as a whole would have to be marketed as the unique traditional product of India. It could be a good marketing strategy to pose it as a holistic preventive health care product and as an essential pre-requisite for the practice of yoga - total health care philosophy.

### Regional Grass Banks

One calamity which is commonly prevalent in the country - and most predictable - is drought. This happens with greater certainty on a periodic basis in many parts of the country. There is maximum damage to the cattle population as a result of drought. And yet, we treat it as a natural calamity and disaster rather than plan for it. It is required to divide the country in 7 - 8 regions and create grass (fodder) development zones. It is in these zones we should follow systematic production of fodder grass on a permanent basis to mitigate the damage to cattle wealth on account of drought conditions. We need to utilize biotechnology and carry out a research with a view to increase the productivity of fodder grass. It is necessary to have 7-8 regions because the fodder transportation would make it unduly expensive due to long distance transportation.

### Animal Husbandry & Dairy

We strongly recommend strategic livestock breeding policy based on the needs of local area and resource availability. The prime objective of this policy should be to increase the production as well as productivity of available livestock resources with modern technology like artificial insemination and embryo transfer technology and by reducing scrub male animals.

Conservation of indigenous livestock should be of priority for which elite livestock of Gujarat like Gir and Kankrej Cattle, Jafarabadi, Surat, Banni and Mehsani buffaloes need to be identified. Their pedigree records need to be stored electronically on embedded microchips. We would like to see this as one of the national projects.

To provide quality veterinary services at the doorsteps of farmers there is a need to for modernization of existing of veterinary institutions in terms of Good Laboratory Practices norms. Department of Space has been offering telemedicine services successfully. Can we extend the concept to veterinary services on pilot basis to some of the districts of Gujarat?

There is a strong need to establish Regional Fodder banks to counteract scarcity of fodders. Bunny region of Kutch district in Gujarat can be developed as national grass development region.



### Insurance coverage for cattle, sheep, goat and poultry farm

In place of the individual animal insurance in small animal sector, group insurance can be more meaningful. Expansion of the recently launched pilot scheme for insurance of cattle and buffalo should be extended to cover the entire country. Relief for losses incurred due to outbreak of diseases for which there is no preventive vaccination should be considered under Calamity Relief Fund.

### Establishment of strong livestock marketing system.

The development of other livestock than the cattle and buffalo is also an integral part of animal husbandry as mostly the weaker section of society are keeping these kinds of livestock for their livelihood.

Activities for development of sheep, goat and its products should also be given priority. There should be an organized structure for marketing, credit and health care.

### Food Security

We accept the importance of food security as a means of protecting the livelihood of farmers as well as in terms of several other issues. We welcome recommendations made by the sub-committee. We also welcome the recommendations relating to nutritional security. In spite of rising income, large section of population, particularly children are anaemic. Gujarat has initiated a number of programmes to counter the stress. These include distribution of vital chocolates fortified milk, flour and biscuits etc., besides nutritional awareness campaign to upgrade dieting habits.

### Conclusion

A lot of effort has been made in various forums to identify and debate various issues impinging upon the slow-down in agriculture sector. Many recommendations have been made and agriculture has been made the focal point in 11<sup>th</sup> Five Year Plan. Various states have also dealt with these issues in their own ways. However, it needs to be recognized that the states who have taken successful initiatives need to be given incentives. Policy prescriptions need to be state specific. To resolve the problems of Agriculture sector '**Four Cs**' seem to hold the key. These four Cs are: **Corporate farming** to bring uncultivable land under cultivation; **Cooperative farming** to reap the economies of scale and prevent fragmentation, **Contract farming** to make agriculture demand driven and finally; **Contact farming** where the scientists contact the farmers to transfer knowledge. This we have been doing in Gujarat under Krishi Mahotsav for the last three years.

**Vande Matram**