

Executive Summary
Of
REPORT OF THE STEERING COMMITTEE ON
AGRICULTURE AND ALLIED SECTORS FOR
FORMULATION OF THE ELEVENTH FIVE YEAR PLAN (2007-2012)
PLANNING COMMISSION, GOVERNMENT OF INDIA (APRIL 15, 2007)

The Steering Committee, in this Report, attempts to highlight the major concerns; identify the causes underlying the present dismal state of agriculture in the country; and suggests a road map for reviving agriculture with a view to placing it on a high, inclusive and sustainable growth path.

I. CONCERNS

Deceleration in Growth

Over the last 50 years, deceleration in the growth of agricultural output was not witnessed for such a long period as seen after 1994-95. Another disquieting feature is that some of the sunrise sectors, e.g. livestock, fisheries and horticulture also started showing deceleration. These growth rates are lower than the growth rates in rural population and workforce in agriculture, implying that per capita income in agriculture is declining. Per capita availability of pulses—a major source of protein in the country—showed a sharp decline.

Degradation of Natural Resources

Land resources are getting degraded through soil erosion, salinity and alkalinity, and chemicalization. Productive capacity of land is declining due to nutrient mining, imbalance in the application of soil nutrients, neglect of micro nutrients and inadequate application of organic fertilizers.

Even after fully exploiting the available water resources, water supply can match the

demand only if there is a big improvement in the efficiency of irrigation. Water table in several states is getting depleted at a fast rate as water withdrawal is exceeding its recharge. Large investments needed for pumping out water from deeper aquifers are reducing crop profitability and making farming unviable for smaller farms.

Equity

Slow growth in agriculture with no significant decline in labour force has created a serious disparity between agriculture and non-agriculture. Practically all the growth so far has come from the expansion of irrigation and increased productivity of irrigated land; rain-fed agricultural productivity has been more or less stagnant. This is mainly due to the low and highly fluctuating productivity and the low risk-bearing capacity of the rain-fed farmers.

The out-migration of men, driven mainly by rural distress, has added to the misery for rural women left behind who have had to share greater work burden in their fields without the necessary rights on land, access to resources, knowledge and skills.

More than 80% of agricultural holdings in India are of less than 2 hectares and more than 60% of farmers operate less than 1 hectare each. As employment opportunities in the non-farm sectors are growing very slowly, there is very little shift of labour force from agriculture. Improving the viability of smaller holdings by providing access to technology, inputs and credit through appropriate institutions remains a big challenge.

Efficiency

Efficiency in resource-use encompasses production, marketing, processing, transport, etc. Farmers in India are at a considerable disadvantage in this respect. To be able to compete in a liberalized trade regime, there is need for a paradigm shift from merely maximizing growth to achieving efficient growth. Moreover, efficient use of resources, including water and chemical inputs, is essential for sustainability.

Vulnerability

With the rise in capital-intensity in agriculture, in the face of natural calamities and other man-made disasters, vulnerability of farmers has increased considerably. Farm harvest prices of various commodities often fall below MSP in the markets where public procurement is not effective. As the institutional arrangements for meeting income losses are either non-existent or very weak, farm households often turn to private sources which lead to indebtedness and loss of productive assets.

II. CAUSES

Public and private investment in infrastructure, including irrigation, technological change, diversification

and fertiliser are the four major sources of agriculture growth in India. The progress on these fronts slowed down since the 1990s.

Rural Infrastructure

Burgeoning farm subsidies are impinging upon the government's ability to invest in key areas. Even a one-fourth reduction in these subsidies could enable the government to nearly double its investments in critical areas like irrigation and other infrastructure.

Apart from their misuse and leakages, subsidies in several cases are doing more harm than good through the over-use of irrigation water and imbalances in the use of plant nutrients resulting in wastage and inefficiency.

Degradation of Natural Resources

The main reasons for degradation of natural resources are the increasing pressure of human and animal population on natural resources, policies like free power for irrigation leading to the overexploitation of water resources and the lack of participatory management of natural resources. Fertilizer subsidy has distorted prices in favour of nitrogenous fertilizer causing nutritional imbalances in many areas, adversely affecting land productivity.

Failures in Conservation and Improvement of Rain-fed Land

Watershed development is a major strategy to make sustainable use of natural resources in rain-fed areas. But projects are mostly planned and implemented by government departments in a piecemeal and fragmented manner without actively involving the beneficiary communities.

Technology Development and Dissemination

Agricultural research is under-funded. ICAR and its network has been frequently reviewed by eminent experts, but its highly centralized, hierarchical and bureaucratic set-up has not responded to the need for change. The available resources have not been optimally utilized for lack of clearly stated strategy and rational prioritization of research agenda.

Frontline demonstrations by various departments provide clinching evidence of large gaps between what can be attained at farmers' fields with improved technology and what is obtained with the existing practices, clearly pointing to the large potential for raising output through the effective dissemination of technology, especially in the eastern Gangetic Plains. But this is not happening because of the absence or weak Research-Extension-Farmer linkages. Also, realization of demonstration trials yields at farmers' fields on a large scale would require technologies adaptable to wider regional variations.

The flow of improved varieties and production technology for rain-fed crops and regions with relatively low rainfall has been uneven. Research has tended to focus mostly on breeding varieties of individual crops for increasing the yield potential by more intensive use of water and bio-chemical inputs, to the neglect of cropping systems and practices for prudent, efficient and sustainable use of land, water and chemical inputs.

Market Infrastructure and Regulation

In low productivity regions having a large potential, e.g. Bihar, East Uttar Pradesh,

Orissa, Assam, Chattisgarh and West Bengal, marketing infrastructure is underdeveloped and private trade is exploitative. As such, the incentives for the adoption of new technology are very weak. On the other hand, the potential of private sector to contribute to agriculture growth and benefit farmers through participation in marketing and processing remained largely unrealized because of various types of restrictions and regulations.

Status of Women Farmers

Since women are not formally recognized as farmers but are seen merely as helpers on family farms, agricultural extension agents seldom contact women. Second, existing institutions, including farmers' cooperatives, are structured with male farmers in mind, both in terms of location and forms of interaction. Given social norms and domestic responsibilities, women are far less mobile and less able to use these male dominated institutions effectively.

Imperfections in Land Market and the Plight of Small Farmers

The small farmers genuinely interested in cultivation do not have resources to purchase land. Land that is leased out is on oral tenancy for short periods which discourages productive investments in land by the tenants. This is harming equity as well as efficiency.

III. THE WAY FORWARD

Accelerating Growth

There is a need for stepping-up public investments in agriculture to 4% of GDP Agriculture. This would imply that public investments, at 1999-2000 prices, should

be raised annually by 12% during 11th Plan. To ensure speedy completion of irrigation projects, the poorer states where the potential for the development of irrigation is high, need to be assisted liberally.

Demand Driven Diversification

The emerging scenario of increasing diversification offers an opportunity for raising farm incomes significantly as the employment elasticity for these activities is quite high. Private sector engaged in agro-processing and agro-business can promote diversification both by providing inputs and assured market for output through contract farming.

Input Provisioning

Supply of seed needs urgent attention as quality of seed is the basic determinant of productivity. Seed production and distribution needs revamping by strengthening public sector seed agencies and by involving private trade in seed multiplication and distribution. Quality checks on inputs are becoming important as the unscrupulous trade fleecing farmers by selling spurious seed, fertilizer and chemicals has been on the rise.

Land and Water

Major emphasis is needed on water conservation and recharging schemes, including restoration and renovation of traditional water bodies, as an integral part of watershed development with the involvement of local communities and NGOs.

Institutional changes to improve overall water governance need to be reinforced by creating strong incentives for individual users to make prudent and economical use of water. Increasing the effective cost of

water for individual users and aligning the relative costs for different uses to serve social priorities is essential. This calls for a great deal of effort to raise the awareness of public at large, including the elected representatives, about the consequences of defective pricing and poor cost recovery, and convince them that there is considerable scope for economizing the use of water without adversely affecting their incomes.

At least one model project in each state for surface system should be implemented during the Eleventh Plan for physical modernization, especially distribution network and installation of control structures and volumetric supply gauges; and entrusting management of the systems to an autonomous organization of elected representatives at all levels, with power to decide and enforce rules of allocation and levy and collection of water charges.

Rain-Fed Areas

The emphasis in production should be on farming system approach that integrates crop, livestock, agro-forestry, and horticulture. Wherever possible, agriculture development programmes in rain-fed areas should converge on watershed.

Soil health cards, giving regularly updated information on major and micronutrients should be issued to all the farmers by strengthening soil testing labs in all parts of the country. Production and sale of bio-fertilizers, e.g. compost, organic manure and micro nutrients should be encouraged on a large scale through informal as well as organized production systems by providing appropriate incentives.

The current controversy on the role and authority of different central ministries in the NRA is both pointless and counter

productive. It is much more important to focus on decentralization of planning and implementation along with the necessary resources, through coordinated effort by the relevant departments, down to the grass roots level. The existing guidelines for Watershed Development need strengthening to ensure (a) proper social mobilization and institution-building in the initial stages of the programme so as to ensure community participation on a sustained basis; (b) adequate attention to equity and livelihood concerns of the poor; and (c) convergence of the programmes undertaken by different Ministries at the watershed level with a view to raising agricultural productivity.

Technology

Research priorities need to shift towards enhancing the yield potential in the rain-fed areas by evolving, through recourse to modern biotechnologies, varieties that are drought and pest resistant, and by evolving cropping systems suited to varying agro-climatic conditions.

The key issue in technology is how to make the agriculture research system deliver to the end-users. There is an urgent need to develop technologies keeping the ground situations in mind. Greater interaction with the user-farmers and researchers needs to be fostered for developing technologies which can receive ready acceptance.

Making research responsive to the needs of the farmers calls for complete functional and financial autonomy to ICAR and SAUs, with measures to ensure greater accountability for performance both by research personnel and research institutes.

Outlay for agricultural research and education should be increased to at least

one per cent of agricultural GDP. National fund should be created for strategic research which should be planned, managed and monitored by high level expert scientific committees at Centre and in each state. Research agenda setting and management should be decentralized at the agro-climatic region level.

Agricultural Extension

Measures urgently required to revamp the extension system are : (a) allocation of more resources for extension; (b) closer and frequent interactions between research and extension; and (c) result oriented performance evaluation of extension staff.

Extension system has to employ a variety of approaches spanning Rural Knowledge Centres (RKC), ITC based extension, farmer-to-farmer extension, involvement of PRIs, NGOs and private sector. Women farmers' access to knowledge should be ensured through the women extension workers, especially in the remote hilly and tribal areas where women farmers predominate.

A position of a Development Commissioner of the rank of Additional Chief Secretary should be created in each state, duly supported by the Central Zonal Agricultural Production Commissioners, to coordinate the working of all the concerned departments which should be made accountable to him.

Agricultural Credit

There is a need to increase the supply of institutional credit, through cooperatives, commercial banks and micro finance institutions on easy terms and conditions. The cost of credit delivery borne by farmers should be brought down and interest rate should be kept reasonably low. Though

credit flow in the recent years has shown high increase, the flow to agriculturally underdeveloped areas and small and marginal farmers is far from satisfactory.

Cooperative Credit Societies, that are autonomous and democratic, are the most potent means for making available institutional credit to the innumerable small and marginal farmers. Therefore, the current restructuring of cooperative credit, on the lines of the recommendations of A. Vaidyanathan Committee, should be implemented speedily and rigorously.

The coverage of operational holdings should be increased significantly, with sub-targets for the less developed states and small and marginal farmers. Strict norms should be put in place to curb the practice of old accounts being closed and shown as new accounts.

Since small and marginal farmers have no alternate sources of finance, the share of direct accounts with a credit limit of Rs. 25,000 in total direct finance may be targeted at a substantially higher level.

Steps should be taken to improve the absorptive capacity of backward states in utilizing RIDF by relaxing norms for matching contribution.

Subsidies on Irrigation and Fertilizers

Local-level community institutions should be empowered to levy and collect economic rates for surface irrigation and for power used for pumping water, linked to the volume of water consumed as determined by the local institutions, and use the revenues so collected for development at the local level. Metering devices can be installed at the village level or at the farm level, wherever feasible.

Balanced use of fertilizers should be promoted either by redistributing the prevailing amount of fertilizer subsidy over NPK or by increasing subsidy on P and K in such a way that farmers are induced to use NPK in the right proportion.

Ensuring Remunerative Prices

In the Eastern and Central region, having large potential, like Bihar, East Uttar Pradesh, Orissa, Assam, Chattisgarh and West Bengal, MSP should be ensured through effective procurement.

In each state, a few crops having a potential for growth should be selected and MSP made effective for them through public procurement by developing the necessary marketing infrastructure.

Insurance Against Risks in Agriculture

There is a scope for improving the coverage of NAIS in terms of regions and crops, substitution of long term yield rate as a bench mark and ensuring prompt payment of the indemnities. Decision to devolve the area of damage assessment from blocks to smaller units may be done with care, as the costs of such decentralization and the moral hazards will be very high compared to the likely benefits.

All commercial banks, RRBs and the Cooperative Banks should make crop insurance mandatory for all agricultural loanees, especially because such insurance can indirectly contribute to the viability of rural banking.

Some of the successful insurance products like Rainfall Insurance have recently been developed by ICICI-Lombard General Insurance Company and by IFFCO-Tokyo General Insurance Company. Necessary

incentives should be devised for insurance companies to design suitable products for agriculture sector.

Better Deal for Women Farmers

Enhancing women's rights in land, providing infrastructure support to women farmers, and advancing legal support on existing laws, will get recognition for women as farmers and enable them to access credit, inputs, and marketing outlets. Second, women's names should be recorded as cultivators in revenue records, on family farms, where women operate the land having ownership in the name of male members.

The gender bias in the functioning of institutions for information, extension, credit, inputs and marketing should be corrected by gender-sensitizing the existing infrastructure providers. Women's cooperatives and other forms of group effort should be promoted for the dissemination of farm technology as well as for marketing of produce.

Land Markets and Prospects for Small Farmers

Small farmers should be assisted to buy land through the provision of institutional credit, on a long-term basis, at a low rate of interest and by reducing stamp duty. At the same time, they should be enabled to enlarge their operational holdings by liberalizing the land-lease market. The two major elements of such a reform are: security of tenure for the tenants during the period of contract; and the right of the land owner to resume land after the period of contract is over.

Special programmes need to be designed and implemented to enable small farmers to improve their capacity to go for high value

commercial activities in crop production, dairy, poultry, fisheries etc. These farmers should be provided liberal assistance for meeting capital requirement to take up such activities.

Because of the increased pressure from small and marginal farmers on the limited land for their livelihood, there is no justification, at this stage, for encouraging corporate farming by relaxing the existing ceiling on land ownership.

The ultimate solution to the small farmer problem lies in the shift of labour force to non-farm occupations. For this, the growth of rural non-farm sector through the development of agro-processing and other rural industries is essential. The development of rural infrastructure e.g. roads, communications and power under the on-going programme of Bharat Nirman should be given the highest priority.

Participation of Private Trade

Private sector can play a major role not only in post-harvest handling and distribution of produce but also by forging appropriate arrangements such as contract farming with farmers, particularly for high value crops. Recently, some corporate houses have ventured into opening chains of retail food stores in urban centres which, apart from providing fresh and better quality products to consumers, have also benefited farmers through higher prices - in some cases assured by advance contracts. This is important in a context where farmers face serious marketing constraints, although the evidence so far suggests that transaction costs involved tend to exclude small farmers.

Agricultural Statistics

The formats of TRS Scheme as well as the ICS Scheme need to be thoroughly reviewed

and changed for bringing about a lasting improvement in the basic system of Agriculture Statistics.

An alternative methodology for estimation of production of the horticultural crops as recommended by NSC should be followed. The economic contribution of post-harvest activities such as trade, processing, packaging and the related activities in the periphery of agriculture need to be captured as GDP share of agriculture and allied activities.

IV. CONCLUDING REMARKS

India has an impressive record of taking the country out of serious food crisis to self-sufficiency and self-reliance even when the population of the country doubled since 1971. This success was achieved through the favourable interplay of infrastructure, technology, extension and policy backed by strong political will. Therefore, **the Steering Committee is of the considered opinion that it should be possible to reverse the**

process of deceleration in agriculture growth and step it up significantly during the 11th Plan period.

The basic causes for deceleration and the policy initiatives needed to reverse this process have been long known, as brought out by a number of scholars and knowledgeable persons on the subject. Recently, the National Commission on Farmers in its comprehensive Reports has highlighted the factors inhibiting the growth of Indian agriculture and undermining the welfare of the farmers. Thus, we have before us a clear road map for reviving Indian agriculture and placing it on a high growth path. **What is needed is requisite awareness of the relevant issues on the part of the decision-makers at the state and central level and, above all, the political will to act decisively and accord high priority to agriculture by implementing the major recommendations. The institutional mechanisms to initiate and monitor purposive action need to be put in place at the highest level both at the Centre and the States.**

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