

# Emerging Issues in Indian Agriculture

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## Abstract—

Green revolution technologies and a vigorous smallholder sector have seen Asian agriculture make giant strides in the last five decades. But agricultural transition has not been uniform across Asia and the future of smallholder agriculture faces several challenges arising from a range of socio-economic, demographic, structural and institutional factors that could adversely affect its sustainability.

**Keywords—WTO, Food Security, Trade**

## 1. The Setting

Indian agriculture is shorn of any dynamism right now, as compared to its exemplary performance during the sixties and eighties and later losing gradually its momentum and thrust. There can be many reasons: sheer complacency, institutional inadequacy, structural bottlenecks, poor reach down with the resource poor farmers and lack of their participation in the change processes, political indifference and so on. Things that all related seem in constant flux and one needs to look for exogenous, paradigm shift on the perception and planning of agricultural development.

Many fairy tales of globalization and liberalization, a /a WTO and the Brettonwood Twins, are afloat promising market driven prosperity and growth all over the globe, North and South divide notwithstanding. There is an attempt to deny the cost advantage through non-tariff charges, social and environmental desiderata of production and export. The melt down of the eastern economies of the Asian Tigers .is in different light Cautioning the dangers of unbridled markets and the myths of growth and recovery all the time and all over. Experience of globalization varies by countries, status-of development as initial conditions. Rarely, one would find a developing country kicking heartily with growth and development under market driven and liberalized regime. We have to test the water, assess the strength, weakness, and opportunities before we go with WTO and the developed countries and we are yet to frame the issues carefully and objectively the likely trade-off from the negotiations. There are no broad indication of our approach and strategies that come for the Seattle discussions.

## 2. The Issues

In agriculture, there seems no prospect of consensus or convergence about a / the National Agricultural Policy, assurances by governments over the three decades notwithstanding. To aggravate the situation, agriculture is the state subject and, the process of working out a consensus is complex and confounded. There are

programmes and projects for tackling many a variegated and disparate problems with partial and disjoint focus.

- Then, what is the focus of a national policy on agriculture? Does the farmer gain credence in the whole game of growth and development? How his status is perceived? What policy measures and intervention strategies are needed to raise the farmer to new heights of equity and livelihood, atleast to the levels enjoyed in other sectors? How to accelerate capital formation within and transfer from without? Will the farmer enjoy parity with border prices for his products? How friendly the market, as the farmer feels about and what type(s) of countervailing power and safety - net would need to be provided?
- Agricultural development is a complex process destined to play against Nature and the most important matter one should bear in mind is that this game is played singly by millions of small and marginal farmers who account for more than ninety per cent of households and cultivating less than thirty per cent of sown area in this country; and to this millions, agricultural landless labour households should be added to perceive the problems of developing agriculture. Another segment covers agri-business firms, petty rural traders, artisans and other groups who are interacting with agriculture staking their plight with it.
- On the supply side, land resource is one of the limiting factors determining the scope of spatial expansion of farming activities and there are still about 17 million hectares of not being cultivated because of various infirmities of land resources. Per capita availability of cultivated area has been declining from 0.49 hectare in 1950 to 0.20 hectare in 1990 and this would be around 0.15 hectare in 2010. Besides, productivity of land is varying widely between agro-climatic zones and also between years indicating instability in output to the extent of 30 to 50 per cent. The overall productivity fluctuates around 1.5 tonnes per hectare. Irrigation development is planned to improve productivity and stability in output growth in agriculture.
- On the demand side, population increases at an annual rate of 2.5 per cent and the need of food grains will be around 240 million tonnes by the year. In addition, agriculture has to provide nutritional security through production of milk, meat, eggs, fruits and vegetables besides servicing the industrial needs domestically and that of trade under widening process of globalization. The third aspect of agriculture is that it is a residuary sector for the surplus population in the country and its role in generating opportunities for

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employment will continue to be crucial for economic development.

- The inter-sectoral linkages between agriculture and other industrial, service and Infrastructure sectors are getting firmed up lately and they determine the output growth, income and employment. Thus agriculture in India stands integrated with the policy for the overall development of the economy. Some of the policy instruments are related to stability and sustainability of output and resource use with technology backs up.
- Institutions and farmer participation provide the necessary direction for policy formulation. A review of availability, relevance, acceptance and adoption of farm technologies in fields clearly indicate that technologies are available and, where ever needed, they can be fine-tuned to solve some location specific problems. With orientation towards farming systems approach and participatory research in which farmers are involved in the identification of problems and seeking research solution, the national research system could be geared to meet the demand for generating appropriate technologies for adoption in the next decade or so.

This is easily said than done for various reasons which are organizational, institutional, and administrative. Bureaucrats and technocrats are managing agriculture over a decade and, to their credit, there have been visible quantum jump in productivity and output, lessening the pressure on food security, and winning the race over the population by food security for the time being. However, productivity hits its plateau and stagnates.

Rural poverty, in real terms, remains endemic and oppressive. Regional variations in agricultural growth and poverty reduction are wide and significant. Output from about 60 per cent of cultivated area that depends precariously on seasonal rains arid their distribution is uncertain and unstable. Unemployment and under employment in rural area accentuates the incidence of poverty.

Agriculture has to move from stagnation to vibrant growth. There are promising opportunities, conceptualized, articulated and less realized. As to the roles for supporting economic growth, securing larger income for better livelihood and to absorb unemployed pool of human resources, agriculture has to grow. The issues could be sorted out for bringing in substantial changes in the approach and the components of the change are related to,

Agricultural Growth and Stability

Food Security

Trade

Regional Equity and Development

Rural Employment

The focus will be on policy and policy orientation for bringing out the needed changes and the instrumentality or interventions are about institutions - strengthened and /or built

anew. I will indicate the broader issues involved in the processes.

## **i. Growth and Stability**

Agriculture has been considered once as a drag on economic growth and development because of its low productivity syndrome. The determinants of low productivity are low resource use, limited capacity to survive risks and limited information base for making production decisions. Technological progress through effective R&D system provides support for output growth, and through varietal improvement and choice to get over biotic stress stability is introduced with limited success since monsoons and rains continue to flaunt a game on the farmers. For a 6 per cent economic growth, one would require 4-5 per cent in agricultural growth weighted for weather uncertainty. The weakness in attaining stable agricultural growth lays in the tottering investment base spatially and temporally. A high growth performance over a period is constrained due to stochastic weather aberrations which in most of the cases destroy the asset base and sap the process of cumulative growth in investment. Monsoon failure for year causes not only the loss of current income but also liquidation of productive assets created over a decade or so. Irrigation is one of the productive infrastructure and the potential if 110 million hectares, later upgraded to 143 million hectares taking into consideration new technologies and management would introduce stability in agricultural productivity and output. Crop insurance provides protective shield against risks in agricultural production. In addition, water use planning has multi-goal orientation warranting careful consideration and planning which is necessarily participatory.

## **ii) Food Security**

The role of the state in most of the populous and developing countries in providing food security to the teeming millions can not be fully market oriented; nor the policy instruments shaped for procurement, storage and buffer market operation can be said market-friendly. There is "a trade argument" that food security need not be fashioned to the domestic market only and this can be dovetailed into trade and planning which would ensure a kind of portfolio choice and better trade-off. In spite of the stated approach for the long run, one would be wary about the complete market determination of food security and a national minimum intervention optimally would be critical. Currently, procurement of wheat and rice has been quiet successful and the demand of the Public Distribution System could be met. The basic question of the cost of effective storage and dispersal of stocks of food grains and the probable cost of alternate system needs to be assessed, analyzed and compared-for cost effectiveness for a viable role for the system. A number of issues such as food subsidy to keep the consumer and politicians at ease, contracting for imports with considerable lag in time, adequacy of storage and distribution network would need to be tackled both at political, and administrative and organizational levels. We may require new approach for managerial solutions, as of warehousing and transport models for inventorying and distribution.

### iii) Trade

The expectations of trade, under WTO, to equalize the opportunities for the nations of the world - North and South, among North, among South and so on, are mixed and seem confounded. One would need to be cautious about conditional statements and observations on the functional aspects of the friendly the market such as mediating and moderating the changes into a harmonious mode of interactive processes. It is argued that more the liberalized market more would be regulatory concern in agriculture where small farmers, constituting around 90 per cent of farmers, have to be cared for through institutionalized safety-net for decent livelihood.

The strength of Indian agricultural trade is its production system under varying agro-climatic situations and management modes. The competition comes from Brazil, Kenya, Indonesia, China and South Africa besides the Mediterranean belt of Europe. The issues of agricultural trade are related to building up useful information on market, prices, cost, tariff and other transaction costs which include processing, packaging and modes of transport. There are cases in which trade contract involves transfer of capital and technology pack, buy-back arrangements. The experience varies. It would be necessary, as first step, to strengthen and streamline the procedures in the existing market as confidence-building measures. With this stabilization one need to identify new markets for entry and engagement. On the production and processing side, the choice of tradable commodities is vital but not formidable since these, as a group, would not be large to affect aggregate output and what is very necessary is zonalization of products, building strong supportive infrastructure such that their externalities could be internalized. Organizationally, contract farms, capitalist farming and the like would help small producers of the identified export produce zones to get organized to gain from trade.

### iv) Regional Equity and Growth

- Use either SI (MKS) or CGS as primary units. (SI units are encouraged.) English units may be used as secondary units (in parentheses). An exception would be the use of English units as identifiers in trade, such as “3.5-inch disk drive”.
- Avoid combining SI and CGS units, such as current in amperes and magnetic field in oersteds. This often leads to confusion because equations do not balance dimensionally. If you must use mixed units, clearly state the units for each quantity that you use in an equation.
- Do not mix complete spellings and abbreviations of units: “Wb/m<sup>2</sup>” or “webers per square meter”, not “webers/m<sup>2</sup>”. Spell out units when they appear in text: “. . . a few henries”, not “. . . a few H”.
- Use a zero before decimal points: “0.25”, not “.25”. Use “cm<sup>3</sup>”, not “cc”. (*bullet list*)

### v) Equations

Unfortunately, agricultural / rural sector continues to be residuary to absorb the growing population and its workers. Employment intensity is low for industries and with globalization one would expect capital intensive industries with less potential for substantial employment. Rural unemployment would then continue a major issue. Even in agriculture, partial mechanization to ease the seasonal labour bottlenecks, and to induce part time farming limits the expansion of employment activities. Poverty alleviation depends on job creation and wage income and the key is a structures rural - urban development. Along the development locus of agricultural development one would expect the disappearance of surplus labour and increase in labour productivity and wages in real terms. And for this has to happen, massive investment in private and public sectors is necessary along with a format of agricultural policy to support

In sum, the major issues of agricultural development in the first two decades of the next millennium are concerned with resource development, conservation and use in sustainable agriculture with inter-generational equity in focus. The issues of growth and development in agriculture, food security, regional development, trade and employment will continue to be the challenges with the change focus. Participatory development with the assistance of Panchayats Institutions, and Non-Government Organization would motivate greater involvement of people who matter. Institutions -old and new, need to be fostered and developed.

## References

**Gobal etal (2012)** Agrarian Transition and Emerging Challenges in Asian Agriculture: A Critical Assessment Economic Political Weekly, Vol - XLVII No. 04, January 28, 2012.

**Kannan(2011)** Agricultural Development in an Emerging Non-Agrarian Regional Economy: Kerala's Challenges, Economic Political Weekly, Vol - XLVI No. 09, February 26, 2011.

Achuthan and Sawant (1995) Agricultural Growth across Crops and Regions-Emerging Trends and Patterns, Economic Political Weekly, Vol - XXX No. 12, March 25, 1995

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