

*Issues and Challenges in Indian Agriculture: Bankers' Perspectives**

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I am extremely happy to be associated with this valedictory session of the Seminar. It is a great pleasure to be at this venue, particularly in Brahmaputra. I left as the Principal of the College in May 2007 when this auditorium was under the final stage of renovation. Being at this venue for this Seminar is, therefore, a matter of great pleasure. More significantly, the subject of this Seminar is extremely topical and very relevant for the economic development of the country, particularly from the point of view of employment, poverty reduction and food security. I sincerely thank CAB for organising the Seminar and bringing together so many experts in one forum. Last but not the least, I feel honoured in sharing the dais with eminent agricultural economist Prof. A. Vaidyanathan who is presiding over this session. I would like to cut short what I intended to speak in the manner of playing a T-20 cricket match which is the flavour of the season. There are two reasons for this – similar to the yield fatigue in agriculture, there could be an attention fatigue among the delegates at the end of two days of serious deliberations and, more importantly, all of us are very keen to hear Prof Vaidyanathan.

2. I would like to flag a few issues with which we would be able to connect with all that we have discussed during the various sessions of the Seminar. I would attempt a SWOT analysis of Indian agriculture, more particularly from the bankers' perspective so as to have a holistic understanding of the problems and their possible solutions.

Strengths

3. When we talk about strength in agriculture, many people know – but some

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perhaps don't know – we have the second largest cultivable land area in the world. We have the largest number of agro-climatic zones. Almost 20 per cent of the economically active population of the world is engaged in agriculture in India. We are among the top three countries in the production of a number of agricultural products such as cereals, milk, eggs, fruits, vegetables, cotton, tea, sugarcane, etc. We have a vast network of good research institutions. Our farmers are quite innovative and open to new ideas. This list is not exhaustive but only illustrative.

Weaknesses

4. When we talk of the weakness in agriculture, nobody has captured it so succinctly as our Prime Minister, Dr. Manmohan Singh, who some years back spoke about four deficits in the agricultural sector – (i) infrastructure deficit, (ii) market economy deficit, (iii) public investment/credit deficit, and (iv) knowledge deficit. The last one has been extensively discussed in the penultimate session on agricultural extension. Public investment in agriculture has more or less remained stagnant at about three per cent of GDP. In the last three to

four years, it has picked up some momentum, but there is enormous scope to increase the public investment. This is particularly so for irrigation and water management as around 57 per cent of the agricultural land is still rain-dependent. Unless there is long-term investment in the agricultural sector, productivity and production will not increase. One major weakness of agriculture in India is its low productivity as compared with the world average. For example, in the case of wheat, the yield per hectare is 2.89 metric tonnes while the world average is 3.01 and the Chinese average is 4.77 metric tonnes. In the case of rice, it is still lower at 3.18 metric tonnes *vis-a-vis* the world and the Chinese average at 4.25 and 6.59 metric tonnes, respectively. In case of coarse grains, which are the staple food for a large section of the poorer people, the Indian average is a meagre 1.38 metric tonnes while the world and the Chinese averages are 4.95 and 3.59 metric tonnes, respectively. (Table)

5. We have not been able to exploit the available scope for increasing the level of yield even at the existing level of technology and management practices. There are also stark regional variations in the gap between

Table: A Comparative Position of Yield of Major Crops: India and World
(Metric Tonnes per hectare)

Country	Wheat			Rice			Coarse Grains			Oilseeds		
	2007-08	2008-09	2009-10	2007-08	2008-09	2009-10	2007-08	2008-09	2009-10	2007-08	2008-09	2009-10
1	2	3	4	5	6	7	8	9	10	11	12	13
India	2.71	2.79	2.89	3.31	3.28	3.18	1.46	1.48	1.38	1.04	0.97	0.94
United States	2.70	3.02	2.99	8.09	7.68	7.94	8.77	8.82	9.61	2.58	2.53	2.78
China	4.61	4.76	4.77	6.43	6.56	6.59	4.95	5.3	4.95	2.11	2.16	2.12
World	2.80	3.04	3.01	4.18	4.22	4.25	3.39	3.53	3.59	–	–	–

Note: Yield for 2009-10 are projections as on April 2010.

Source: United States Agriculture Department.

the yields in the research centres and at the actual farm level across the states. To give some examples, in case of wheat, it is 84 per cent for Madhya Pradesh, for rice over 100 per cent for Assam, Bihar, Chhattisgarh and Uttar Pradesh, for soyabean 185 per cent in Karnataka and for sugarcane it is 167 per cent in Madhya Pradesh. As there is very little scope for increasing area under cultivation, it is imperative to target low productivity areas, bridge yield gaps and enhance overall productivity to meet our food requirements. With concerted efforts, we can increase the production by 50 per cent provided these loopholes can be plugged.

6. Another related area of weakness is the infrastructure for agriculture. One glaring deficit is the cold chain for the agricultural produce. One example often cited is that for the grapes from Nashik going to the Netherlands, the time taken is twice the time taken for grapes coming from Chile to the Netherlands although the distance covered in our case is about half. In fact, if there is an initiative like the Golden Quadrilateral to handle the cold chain movement across the country, it will result in tremendous change in marketing and better price realisation for the farmers.

7. There are also serious weaknesses in other areas like institutional deficiencies in credit delivery system, particularly in the co-operative finance structure, as reflected in the decline in the share of institutional credit and increase in the share of money lenders/other non-institutional sources of credit. Poor post-harvest management and ineffective extension system in terms of dissemination from Lab to Land and Land to Lab are other major areas of weakness.

8. Another major area of weakness is the preponderance of small and marginal farmers whose land-holding size is progressively declining. Taking care of these small and marginal farm holdings in terms of their efficiency, productivity, viability and sustainability over time is a major issue.

Threats

9. A major threat is what will happen in the post-WTO global scenario when the tariff and non-tariff protection to our farmers will no longer be available. The second major issue is climate change and its impact on agriculture, particularly on small and marginal farmers as their capability to cope with climate change events is limited. Climate change would have varied implications in terms of delayed/deficient rains, melting of glaciers and flash floods.

10. There is another threat that agriculture in India is facing. Some delegates here have spoken about very old people now being left in agriculture. There is also a large-scale feminisation of Indian agriculture. In many areas all able-bodied males are away in Surat, Mumbai or Nashik and malnourished women/children and old people are left to handle agriculture. Further, another unintended consequence of Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) is shortage of farm labour in many places. Thus, the issue we are facing is whether we have the right type of manpower to manage agriculture.

11. There is also the issue of sustainable and responsible agriculture. Some speakers have referred to the situation in Punjab. The issue

relates to unbridled and unplanned use of inputs. For example, pumping fertilisers without caring about its impact on the soil nutrients and increased salinity of the soil has resulted from a major change in the land-use pattern where paddy is perforce being grown in India's wheat-bowl.

12. Perhaps the biggest threat to Indian agriculture is that it continues to be a gamble on monsoon. If there is a good monsoon this year, this could also turn out to be a big threat. You may be surprised as to why I am making this provocative statement. This is so because people will forget the fundamental and structural issues which are facing agriculture once there is a good monsoon. A lot of debate has been generated in the last few months with focus on taking concrete action because we were facing a drought and decreased production. The threat in the Indian context is that when there is a shortage we spring into action. We do not go into the root cause and forget the structural issues affecting agriculture. Even assuming that there is a good monsoon this year, let us accept that the viability of agriculture and food security will remain major issues for years to come. So we need to focus on addressing the structural issues on an urgent basis.

Opportunities

13. Now coming to the opportunities, as I have mentioned earlier, we have around 36 agro-climatic zones in the country. We are endowed with plentiful resources which, if optimally harnessed, will not only feed our country but half of the world. There is a huge demand for food and food prices are

going to be sticky. This would provide the sustainable basis for a remunerative and viable agricultural sector. Enhanced demand for food is emanating from multiple sources. Population is increasing, incomes are going up and lifestyles are changing, leading to increasing demand for food. Demand for non-vegetarian food is also increasing, partly as income levels are going up. Non-vegetarian food will need more agricultural products in terms of feed. There is also increasing demand for agricultural produce as a source of fuel (e.g., 50 per cent of Brazilian sugar is used for bio-fuels). So all these factors – food, feed and fuel – are contributing to the demand for agricultural products. This provides ample opportunity for Indian agriculture to reap the benefits.

14. The other significant issue which I want to bring to your notice is that the post-WTO context, when the subsidies provided in the industrial countries come down, would provide us the opportunity to become a real agricultural powerhouse of the world. There is a lot of scope to increase the level of value addition, as its share in agriculture is abysmally low compared with many other countries and, thereby, help in improving the share of agriculture in our GDP. Some speakers have also referred to the NSSO study which highlighted that about 40 per cent of the farmers do not want to continue farming and given a choice they would go for some alternative livelihood option. On the other hand, corporates are rushing into agriculture as a number of corporates and private sector players are keen to seize such opportunities. This shows that while individual farmers want to get out of

agriculture, the corporates are finding value in it. This throws up tremendous opportunities for employment and income generation in agri-business/agro-industries and the supply chain, if the capabilities of corporates can be harnessed optimally.

15. The other big opportunity in the field of agriculture is of special relevance to the bankers. As we have seen, one weakness is that there are a large number of small and marginal farmers with small land-holdings which impact the productivity and efficiency of the sector. This, however, could be an opportunity. 80 per cent of land-holding is held by small and marginal farmers and almost 80 per cent of them do not have access to formal financial services. If banks can rope in these small and marginal farmers to the formal banking system it would make good business sense for them rather than looking at rural banking as a part of 'Corporate Social Responsibility'. It makes sense to finance this sector, generate income, garner savings and collectively make it a win-win situation for the small and marginal farmers and the financial institutions. As many of us know, one of the lessons of the financial crisis in the West is that there has been less reliance on retail deposits. The rural sector with increased income generation capabilities will provide a stable source of retail deposits for the banks. If banks believe in 'Small Customers, Big Markets' they have to strive to bring this large, untapped segment to the fold of the financial sector. Although small and marginal farmers provide great business opportunity, it has to be recognised that the whole range of financial services like credit, both production and consumption, saving products and remittance facilities should be provided to them.

Mantra of F A R M E R

16. Here, I would like to chant a small mantra, which I quite often repeat. While financing the farmers, the bankers have to be involved, directly or indirectly but intimately, with all the alphabets in FARMER: Finance, Allied Activities, Risk Mitigation, Marketing, Extension & Research Support and Resources other than finance.

17. *Finance:* When we finance the farmers we need to provide finance to the entire family, for the entire cash flow, not only for the short-term but also for long-term purposes by taking care of all the requirements of the farmers. Agriculture financing should not be an exercise in achieving the targets somehow without real conviction about why we should be lending. If the lending has to be viable or sustainable, it has to be done in a holistic manner, catering to all the needs of the farmers. One example in this regard is financing the repayment of the usurious loans taken from the informal sector. Some people do talk of bringing the money-lender back into the system as they provide almost round the clock credit facility even though at a higher cost. Near 24 x 7 holistic service from the formal system is possible now if the innovative BC/BF models of delivery channels are optimally integrated with the traditional brick-and-mortar branches. Given the available and emerging ICT solutions, including the emerging possibilities in mobile phone-linked banking, transaction cost of providing near-doorstep financial services to the rural population can become very low.

18. *Allied Activities:* Vulnerability of the farmers to yield and income fluctuations is mitigated if we give not only crop-related finance, but also for allied activities which provide a cushion to the farmer. Allied activities provide an important source of supplementary income to the small and marginal farmers and women in the rural areas. Besides the nutritional impact on the population, given the increasing demand for milk, price of which has been going up sharply, there is tremendous scope for financing milch cattle. It must be recognised that India has one of the largest livestock population in the world. The livestock sector contributes over 4 per cent to the total GDP and about a quarter of the GDP originating from agriculture and allied activities. Such allied activities, like milch animals, linked with the cold-chain can provide a daily cash flow to the farmers. This would protect the farmers from the vulnerability of cyclical volatility arising out of price and yield risks in crop cultivation.

19. *Risk Mitigation:* A lot of issues have been raised in the context of risk mitigation for the rural lenders. One area on which we may try to focus is to go on a mission mode to form the Joint Liability Groups (JLGs) for agricultural financing as the SHG groups have been successfully tried in the non-formal sector. Through the group-lending model of JLGs, risks can be mitigated to a great extent. With the federated structure, they will have the advantage of aggregation. There are other forms of innovations in organising the small and marginal farmers like the Producer Companies which would help in aggregation in procurement of inputs, extension services and marketing, thereby increasing the viability of the small farm households.

Besides, wherever they are functioning effectively, cooperatives may also be promoted in a big way. These are some other interesting innovations for aggregation. Recently I read about the example of the El Tejar company in Argentina where they are pooling together small and marginal farmers, taking their land on rent and providing them wage employment. It provides the entire package of best agricultural practices, inputs, marketing, etc. Back home, there are also NGO-promoted collectives like the Deccan Development Society in Andhra Pradesh working for the small/marginal farmers. It needs to be recognised that unless we focus on aggregation and provide end-to-end financing, production and productivity in agriculture would not increase and the vulnerability of the small farm households would continue to pose risks to the financial system.

20. *Marketing:* Efficient marketing, of course, is very critical if we have to ensure remunerative price to the farmers and fair price to the consumers. Post-production financing and lending against warehouse receipts are the opportunities to be encashed. Bankers have to get proactively involved in the production-marketing linkages in the supply chain if they have to de-risk themselves and the farmers. It is essential to bring the producers into the value-chain of farm-gate to food plate as this would provide the producer remunerative prices and make agriculture viable and sustainable. While talking about remunerative prices and the value-chain, I would like to give a small example. Last year I had gone to Nashik, which is just 200 Kms. away, to attend a marriage ceremony. I had gone from Mumbai where the price of onion was ruling

at Rs. 20 per kg. but I found in the suburbs of Nashik the price was Rs. 5 per kg. The general rule is that on an average the producer gets only one-third of the last mile price as there is a lot of gap between the farm price and the consumer price. People say food prices have gone up and farmers are being benefited. In fact, except for a few, the major gainers in increased consumer prices are the intermediaries.

21. *Extension:* Extension and research support is very important. One main reason why during the green revolution production and productivity increased was that a lot of banks had vast pool of young and committed agricultural extension offices. While working in some areas of Andhra Pradesh, I have seen some banks providing a lot of extension support to the farmers. For example, Indian Bank had established clusters under which the hub branch having one or more field officers/experts would cover six/seven branches. Given the poor state of governmental extension services, the bankers' own initiatives are very critical. One obvious choice could be leveraging agriclinics financed by banks and linkages with agricultural university and Krishi Vigyan Kendras. As there is a large potential to bridge the yield gap, it is essential that research and extension support is extended by banks, governments, private sector and others in the public-private partnership (PPP) model, if our focus is on increased production, productivity and prosperity in agriculture.

22. *Resources other than Finance:* Finance is the leading resource but we also need to focus on resources other than finance. It is very critical to ensure availability of quality seeds, optimal use of water and safeguarding

soil health. In fact, when we talk of financial literacy, there should also be talk about water literacy and soil literacy. Water is going to be the key element in the years to come. How best we use every drop of water is going to be extremely important as agriculture uses the maximum amount of water. Watershed development is one area which needs close attention of the banks and NABARD, as Indian agriculture is predominantly rain-dependent. All these aspects relating to FARMER are to be kept in view by banks while financing agriculture in order to make the whole sector viable and sustainable.

Three Suggestions

23. At the end, I would like to touch upon three more generic suggestions. First, we keep on talking about targets for agricultural lending but rarely about targets for production and productivity. Be it at the State Level Bankers' Committee (SLBC) level or at the District Consultative Committee (DCC) level, whenever we plan for the financing of the district, we must plan for production and productivity also. If production and productivity in the district is at X level, then at the end of the year, after implementation of the various financing programmes, it should be X plus something. We must analyse that if it has happened, how it happened, and if it has not happened, why it did not happen. Farmers who meet the productivity targets can be given some incentives. The incentives could be in the form of interest rebates, grant of funds for development work and free development work under MGNREGA besides recognition of the farmers and the field-staff of banks/

government agencies. The corpus for this purpose could be created at the district level from the contributions of banks, NABARD and the Government.

24. Second, we have to innovatively tackle the issue of the fragmentation of land. If we can dematerialise the land-holding records on a mission mode, the aggregators can use such dematerialised land for contract/collective farming with all the benefits of backward and forward linkages and a land-lease market can develop on sound lines. In this way a lot of land wastage because of fragmentation and bunding for demarcation can also be avoided.

25. Last, but not the least, as I was quoting the Prime Minister earlier, there is a huge knowledge gap which needs to be bridged if we want to make agriculture viable and sustainable. I think the role that the Reserve Bank and the NABARD and their offshoot institutions like the College for

Agricultural Banking (CAB) and the Bankers' Institute of Rural Development (BIRD) can play is very critical. Unless we have good quality cutting edge manpower at the grass root level as also at the corporate planning level in the banks the EverGreen Revolution will remain a chimera. For developing high-quality manpower, institutions like the CAB and the BIRD have to constantly raise their bar in relation to training and capacity-building. Practical utility of the training of bankers has to be rigorously evaluated by way of field-level impact assessments. CAB & BIRD have also have an important role in bringing together all the stakeholders to symposia and seminars like this for generating game-changing ideas based on field-level experience for the benefit of the policymakers and the field-level functionaries. Here, I would suggest that we also need to involve the farmers in such brain-storming seminars lest we should forget the largest stakeholders.