

# NABARD

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## NEWSLETTER

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### CHAIRMAN DWELLS ON ISSUES IN AGRICULTURE

Chairman was recently invited to deliver a Valedictory address for the delegates of a Seminar organized by Indian Merchants Chamber. Here is the text of the speech delivered by Chairman.

My dear friends Dr. Paroda and Dr. Barwale, and other distinguished guests,

When the invitation to deliver the Valedictory Address was extended to me by the Indian Merchants' Chamber, I was not sure whether I should accept it because I did not know what I could give by way of address as I did not have much contact with the world of research for the last 4-5 years. I accepted the invitation as I stood to personally gain quite a lot from this conference. Having heard the erudite discussions in the Seminar, I will now go back with the confidence that Indian agriculture has a bright future and we are heading in the right direction.

There is fixity of certain things that must be taken as 'given' and even if we wish to change the situation; it is not possible to do so. Take for example, the landholding pattern in India, 82 per cent of the 13 crore farmers in the country are small and marginal. This situation will deteriorate further; it will not improve, notwithstanding the meticulous land reform measures taken since Independence of the country. We have to accept this situation and design government initiatives – whether for credit delivery, supply of inputs or development of technology for agriculture, keeping in mind the marginal/small farmers and enable him to undertake sustainable agriculture and produce enough to feed himself and the country.

Last year, agriculture looked up for the first time, when it grew at 4.5 per cent. For the previous three years, the growth rates were 2.6 per cent, 1.7 per cent and 3.5 per cent, respectively. Rice and wheat production reached an all-time high of 96 million tonnes and 78 million tonnes, respectively. A remarkable progress indeed, when you look back. In 1950, we had 6 million hectares under wheat and 27 million hectares under rice. Also the rice and wheat yields were 6 quintals each. Now rice acreage has gone to 43 million hectares and wheat acreage has gone to 30 million hectares. While wheat yields have increased from 6 to 28 quintals per hectare, rice yields have gone from 6 to 22 quintals per hectare. Obviously, rice is lagging behind wheat in terms of productivity. I see there are two reasons for this. The first is that the breakthrough in Green Revolution in India was initially in wheat and not in rice. We imported rice varieties through IRRI. The second is that the sleeping giants, i.e., the states of Orissa, Bihar, Jharkhand, Chhattisgarh, Assam and West Bengal have not been tapped to their full potential. These states account for more than 50 per cent of rice area but the yield levels in all these states, except in West Bengal that has a productivity level of 25 quintals per ha., languishes at a measly 15 quintals. In these states there has been no productivity enhancements for the last 10-12 years. Productivity levels have gone down in all these states although the climatic and soil conditions in these states are conducive for growing rice. This year, for the first time, rice production in Orissa has reached 8.8 million tonnes, a jump of 2 million tonnes

over the previous year. There are various factors for it. If the country can harness their potential to the level of Haryana or even Andhra, India's food security can be taken care of very easily.

The National Development Council (NDC) appointed a Sub-committee in the Ministry of Agriculture. The Ministry of Agriculture in turn appointed Working Groups to address the challenge of low productivity and for providing food security. The final report was discussed in the NDC and Rs. 25,000 crores were kept aside for the National Food Security Mission. We are also implementing the Rashtriya Krishi Vikas Abhiyan, which is expected to give priority to development of agriculture in these hitherto neglected states. Our attention must get added to these states as well, while not diverting from Punjab, Haryana, Tamil Nadu and Andhra Pradesh. State interventions do give a very big fillip to production. There was no system of procurement by the state agencies in these states, leading to distress sale of paddy as a large chunk of farmers are below the poverty line. Look at Chhattisgarh; five years back, the government introduced a procurement programme and the yield of paddy doubled from 7 quintals/ha. to 14 quintals/ha. Similarly, Orissa introduced a procurement programme two years ago and their production of paddy increased from 6 million tonnes to 9 million tonnes. This one intervention has helped these two states to pick up their paddy productivity.

In 1978, hybrid rice was commercialized in China and by 1990, 55% of rice area,

i.e., more than 17 million hectares was under hybrid rice, and at that time, hybrid rice accounted for 20% of world's total rice production and 55% of China's total rice production. In India, hybrid variety did come, but progress has been very tardy. I don't think we have more than a million hectare under hybrid rice, though rice area is 4.43 million hectares. Popularizing of hybrid rice cultivation with focus on eastern states has tremendous prospects for food security of India. I advocate such an approach to ensure food security.

In the 1970s and 80s, public investment & capital formation in agriculture was very good but the decade of 90 witnessed a decline in these. Public investment declined from 3.4% of agriculture GDP in the early 1980s to 1.9% in 2001-03. Because of the complementarities between public sector and private sector investment, the deceleration in the growth of public sector investments in agriculture will adversely impact the private sector investments also, thereby affecting productivity and production not withstanding the introduction of new varieties and good scientific material inputs for increasing production.

Farming, can be categorized into three segments, viz., the irrigated farming, the industrial agriculture and the resource poor agriculture. Punjab and Haryana practised Green Revolution farming technology that involved usage of HYV/hybrid seeds, fertilizers, pesticides, modern agricultural machinery, access to irrigation and adequate credit to adopt the technology. This transformed the production scenario in these states and brought about the much required food security to the nation.

Maharashtra and some of the states practice industrial agriculture. Farmers cultivate sugarcane for producing sugar and adopt an intensive system of cultivation. Although, public investment has focused on irrigation, only 40% of the total area is irrigated. I am not unhappy with that at all, for the simple reason that although with 40% of our area is under irrigation (about 60% of our ultimate irrigation potential), we account for 20% of world's total area under

irrigation. We are number one in the world in terms of area under irrigation. So we have enough irrigation available. Even in terms of annual rainfall, we are better off than many countries in the world, although we do face droughts and floods from time to time.

As the purchasing power of the consumer increases, the food basket gets diversified, as has been amply evidenced during the economic boom in the country. The question is who will produce these diverse products; the commercial farmer, the irrigated farmer or the cash rich farmer? These categories of farmers will opt to produce commercial crops while staple food crops would come from the field of resource poor farmers. In my view, our concern and focus should be on the fact that the future of the country's agriculture lies in the hands of our resource-poor farmers, whose number is very large, holding size is very small, land quality is very poor and who do not have access to irrigation and credit facilities. It is this group of farmers, who must be the centre stage of our attention in agricultural development programmes. I believe that public investment and policy support will have to be focussed on the lands of resource poor farmer. We have to ensure that he gets timely and adequate credit. Now, again you look at one example of West Bengal. Ninety four per cent of the farmers are small and marginal; they account for 84 per cent of the land. Now if 94% farmers do not have access to credit and irrigation infrastructure for investing in agriculture for developing irrigation, our production will be severely affected.

Now, look at the other side of agriculture. It was a necessity and we remain obsessed with the idea of ensuring self-sufficiency in foodgrains. All our resources, technology transfer and everything was concentrated in achieving this objective due to which horticulture, which has an immense potential, remained a neglected subject in our development initiatives. The Seventh Five Year Plan allocated only Rs. 25 crores for development of horticulture in all the states. It was only in the Eighth Plan that the need to give boost to horticulture

sector was recognized and an allocation of Rs. 1000 crore was made, indeed a quantum jump. Since last few years, horticulture has got more focused and the National Horticulture Mission was set in 2005-06 during the Tenth Five Year Plan to develop horticulture in all states.

The global financial meltdown has impacted many countries, including India and China. Everybody is saying that India will not be able to sustain the growth rate of 9-9.5% and it may come down to around 7%, while the pessimists put it at 6%. Which sector can sustain growth is a question that needs to be addressed. Is it the Services sector with a growth rate of around 12-13 %, the manufacturing sector 10-11 % or the agricultural sector lagging behind with 4% growth rate? But to sustain the growth of the services sector or manufacturing sector, the increased demand has to come from consumers. With 30% population being urban, even if the purchasing power of this segment of the population increases, there are limitations to the extent of effective demand. In my view, it is the rural customer, if equipped with sufficient purchasing power, who can give a boost to the growth of the services and manufacturing sectors. This can sustain at least the current levels of overall economic growth. Unless we ensure that Indian agriculture positioned in the trajectory of high growth, we will not be able to sustain the current levels of high growth rate. In order to achieve this, we have to deal with following issues:

- Policy makers have an impression that Indian agriculture today is suffering from a technology fatigue. The pace of new technology has perhaps slowed down and stagnated and is no longer the same as witnessed during the decade of 70s and 80s. This issue came up prominently and was discussed in National Development Council.

- The second issue that came up prominently for discussion in the NDC was that of soil fatigue. Irrigated soils which are multi-cropped and used for growing HYV/hybrids have been heavily mined, resulting in nutrient imbalance in such soils. In these soils, Leibig's Law

or Law of Minimum applies. The Law states that growth is controlled not by the total of resources available, but by the scarcest resource (limiting factor). This concept was originally applied to plant or crop growth, where it was found that increasing the amount of plentiful nutrients did not increase plant growth. Only by increasing the amount of the limiting nutrient (the one most scarce in relation to "need") was the growth of a plant or crop improved. To make it simple, applying 5 kg nitrogen per hectare is meaningless, if the soil does not have 5 kg of iron that is required by a crop to give adequate production. Soil as a factor in production has been neglected over the years. This needs to be corrected through periodic soil testing and taking remedial measures to restore soil fertility. Precision farming and drip irrigation does help in maintaining soil fertility.

- Third factor that we need to address is the costs factor. The rising inputs cost is becoming a major problem for small and marginal farmers, many of whom find farming an unviable proposition. The mismatch between the rise in inputs costs and output prices has distorted their relationship and the farmers are not getting enough returns. Look at what BT Cotton did, in Maharashtra or in other states. Increase in production made cotton a viable proposition for the farmer. But when he was growing hybrid and HYV cotton, the production was inadequate and the prices were inadequate were also to meet his cost of production. There are several studies to show this by the Agricultural Universities in Maharashtra. Green revolution technology makes farming highly dependent on many inputs. These inputs are produced industrially in different locations and reached to the farmer through different agents, leading to rise in costs. Our resource system has to work on how to keep our cost of production low and improve farmer's margin. New technology must be assessed for its economics. I always believe that farmers should not just opt for yield maximization but should aim at profit maximization.

- The last but an important factor is credit. In 1950s, 92% of the credit for

agricultural system was coming from moneylenders. 0.9% was coming from commercial banks and 3.3% was coming from co-operative banks. Then later, banks were nationalized in 1969 for the first time while Regional Rural Banks (RRB) were set up set up from 1975 onwards. The respective State Governments patronized co-operative banks. Co-operatives and nationalized banks put together, did support agriculture in 70s and 80s and by 1991, the share of commercial banking and formal system, including co-operatives, had gone up to 66%. But in 2002, it came down to 61%. That was again when people went to moneylenders. This is an issue that resulted in the announcement of a package for doubling agricultural credit from institutional sources in three years. As a consequence, agriculture credit in the last five years had more than tripled. The agriculture credit increased from Rs. 86,000 crores in 2004 to Rs. 2, 43,000 crores in 2007-08. This year 2008-09, NABARD have kept a target of 2,80,000 crores. But there is an area of concern, as most of the agriculture credit is going to large farmers. If you see the number of accounts that we are covering, the number of accounts have not increased significantly, but the per capita loan has increased very significantly. Generally, small farmers are left behind as they don't have access to credit. So, not having enough investment to make for using technology is the real problem of the small farmer trying to practice agriculture and feed the nation. So how to give credit to this man has now become an important issue?

As you all know, NABARD has started a programme called Self-Help Group Bank Link programme in 1992 as a pilot. Based on the success we upscale this programme. We have been able to link with the programme fifty eight million families in India, and this is the largest micro-finance programme anywhere in the world.

We we are working on a pilot scheme, where we are bringing small farmers together to form groups. The group dynamics will give confidence to the banks to lend. Today, banks compete with each other to give credit to Self Help

Group (SHG) women. So, it is to be seen whether similar confidence can be brought in banks to provide credit to the groups of small and marginal farmers. Access to credit will help farmers to apply technology and produce more. But credit as a factor has to be looked into.

When we come to irrigation, as I said, there were times when any irrigation project you take was very cost effective. The summer's area to command area the ratio was very positive. If you go ahead, the sites you have to create storage will be very few. We have also to deal with problems of salinity and water logging. Already, 2.46 million hectares of land is water logged, 3.4 million hectares of land has stagnant water storage.

While we have to address these issues locally here, we also have to look at breakthrough in bio-technological research. Because, as we are discussing just now, the conventional breeding system you have 52 cars, the number of combinations in which they can come to fulfill your requirement, will always be a fixed one. Beyond that, there is no answer. Beyond that, if you want a financier, biotechnology is the answer.

I must take a leaf from what Chandrashekar had said- Shraddha, Saburi. Patience. But how long the patience ? 1998 to 2008; Ten years? So, we have wonderful materials in our laboratory, we have to find ways and means of accelerating the scientific and regulatory process. I know, a scientific system will take a certain minimum time. We can't accelerate beyond that. But then we have got to commercialize biotechnological products as early as possible so that we are able to give the technology to the farmer. This is what the research system did in 1970s, 80s and 90s. The credit for the increase in Indian agricultural production goes to scientists. Because they consistently gave us new seed varieties and we gave it to the farmers. Whatever gain that variety would give, is over. By the time you are giving one more variety, the next step of production enhancement continues. So, that is how you have to go. Our resource system has to accelerate the process of new

technologies, particularly bio technological products. In future, the answer to these problems will lie in addressing the situations that you are facing, whether you have a pot borer resistant brinjal or a chickpea or a brown plant hopper resistant rice or nitrogen use efficiency enhancement gene in rice. All these are necessities of future which you have to work upon and have to get faster results. Get them to the farmer as fast as possible and that is where perhaps the second green revolution will really start. I don't need to talk more than this on this occasion. As I said, it has been a wonderful experience for me to listen to all of you. Such a lot has been happening and may be I will call some of some time to speak to my people in NABARD as to what else is happening in this scientific community; both, the private system and the public system. Because there is no watertight compartment and it is not required to be there. Private and public partnership has to be the order of the day. Work hand in hand to address issues of the nation. Thank you.

## UPDATE OF FINANCIAL INCLUSION

Actions initiated under Financial Inclusion Fund (FIF) and Financial Inclusion Technology Fund (FITF)

- State level seminars and district level workshops for sensitizing the various stakeholders have been conducted by NABARD ROs.
- NABARD has also supported seminars / workshops conducted by other organizations to sensitize larger segment of various stakeholders.
- NABARD has designed and conducted a five-day training module for capacity building of its field level officers.
- 'A Handbook on Financial Inclusion' was prepared and distributed to various stakeholders.
- Reserve Bank of India appointed a

Special Working Group on deepening of Financial Inclusion in Goa under the chairmanship of OIC, NABARD, Goa. The report has since been submitted.

### Projects sanctioned under FIF during 2008- 09

- i. Programme for Training of Trainers on financial literacy at Kolkata.
- ii. Pilot project to establish Farmers' service centres / village knowledge centres, mobile credit counselling centres, promotion of financial literacy and farmer education through mass media to promote financial inclusion in South Malabar district of Kerala through South Malabar Gramin Bank.
- iii. Pilot project for capacity building of the Farmers' Clubs for providing services as Business Facilitators (BFs) by Tripura Gramin Bank (TGB). 25 Farmers' Clubs of three districts viz., West Tripura District, South Tripura District and North Tripura District will be covered in the pilot, to generate new accounts and business for TGB.
- iv. Research and Development Project for ICT solution under Financial Inclusion in 15 select RRBs with support from World Bank and Technology provider.

### Projects sanctioned under FITF during 2008- 09

- i. Smart card based pilot project in Tirunelveli District of Tamil Nadu to help Pandyan Grama Bank (PGB) and NGOs in registration, loaning process and micro financing to SHGs. The project covers 500 SHGs – 6000 customers.
- ii. Project on smart cards in three districts viz., Medak, Mahbubnagar and Warangal districts of Andhra Pradesh to facilitate payments to the beneficiaries of NREGS and Social Security Pensioners and opening of 'No Frill Accounts' of other rural households by Andhra Pradesh Grameen Vikas Bank (APGVB). Services are being extended through Business Correspondent Model with the help of a biometric card and

Mobile device. The project would cover 1288396 beneficiaries in 1115 villages.

- iii. Pilot project to bring about inclusive growth through Financial Inclusion at the bottom of the pyramid by establishing Financial Inclusion Hubs at 10 Primary Agricultural Cooperative Societies (PACS) in Andhra Pradesh. It aims to establish an e-Branch facility in ten PACS so that they can offer multiple financial products & services.
- iv. Pilot for installing four ATMs in North East which has large segment of financially excluded population, one in each district of Tripura by the Tripura Gramin Bank (TGB) for technology upgradation to reach out to the customers.
- v. Impact study of 100% achievement under Financial Inclusion in Kanyakumari district was supported by NABARD.

### Projects sanctioned during the current year

- i. Financial Inclusion in the North East Region through Bio metric Smart cards – State Bank of India
- ii. Using Post office as Business Correspondent of RRB – Uttaranchal Gramin Bank
- iii. Training Module for Business Correspondent (BCs) / Business Facilitators (BFs) by IIBF : It has been decided to support the training cost of candidates who undergo certification programme of IIBF for BC / BF in collaboration with IIBF. The details of modalities are being worked out.
- iv. Financial Literacy Programme : It has been decided to support Financial Literacy programmes for better Financial Inclusion in excluded regions of the country particularly Uttar Pradesh, Bihar, Orissa, Madhya Pradesh through specialised organisation / NGOs / institutions having good exposure / experience in the area such as ISMW, Access, etc.

Visit NABARD website at [www.nabard.org](http://www.nabard.org)

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