

*Agriculture: Emerging Issues and Possible Approaches**

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It is an honour and privilege for me to be with you on this memorable occasion. This is a convocation address, no doubt, but it is also an occasion to dedicate my address to the memory of Acharya N.G. Ranga garu. His views on political economy and agriculture have acquired great relevance and special significance in today's turbulent world of high food prices and focus on farmers' well-being. You, my young friends, will have a critical role in resolving the emerging issues relating to agriculture, both in India and globally.

Acharya N.G. Ranga, who was educated in prestigious institutions in the United Kingdom and was a Professor of Economics at Pachaiyappa's College in Madras University, entered the Guinness Book of World Records as a Parliamentarian with fifty years of service in legislative bodies. He was a leading freedom fighter of national stature and a great propounder, of international stature, of the importance of peasantry and agricultural labour. His beliefs led him to found the Bharat Krishikar Lok Party and the Swatantra Party along with Rajaji, which frowned upon the permit-licence Raj. The economic reforms in India since 1991 have served us well and these have, in many ways, followed one of Professor Ranga's suggestions namely 'liberalisation'. However, only recently we have commenced realising the significance of peasantry and rural labour that he had recognised decades ago. We now realise how critical the situation in regard to agriculture, in particular food prices, is to all sections of the people, all

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over the world. In fact, it is uppermost in the current agenda of central banks around the world in the context of price stability and inflation expectations. I believe that the distinguished faculty and the knowledgeable students of this university would appreciate the contemporary relevance of Professor Ranga's ideas and they will commit to play a historic role in resolving the issues that confront us today.

At the outset, my hearty congratulations are due to the Graduating Class of 2008, who would be receiving their hard earned degrees and awards. I also compliment the staff members who have received awards and the entire faculty for their efforts in imparting high quality education and inculcating good values to shape the personalities of our young generation. It is the endeavour of the students and the staff, I understand, that helped this agricultural university in winning the ICAR's Best Agricultural Institute Award two times in quick succession and also the ICAR Best Performance Award of Students in the ICAR All India Competitive Examinations twice in the last few years.

Dear new graduates, the Reserve Bank has an important stake in the subjects that you have been trained in. Our main objectives relate to maintaining price stability and aid the process of generating output and employment. Agricultural prices are really critical for the household budgets of about a billion people in our country. About sixty per cent of our work force in India is dependent upon agriculture and related activities. Though

most policy issues in this regard fall within the domain of governments and universities like yours, the Reserve Bank has to monitor the developments and aid public policy through the financial system - especially in terms of price stability, financial stability, financial inclusion and credit delivery. In this background, while there are many issues in agriculture, I will confine to a few. I will briefly explore the serious problem of food that is confronting the world today. This is followed by a narration of the Indian situation. In particular the Reserve Bank's approach to agriculture is described.

Food Prices as a Global Issue

In recent months, there has been a phenomenal increase in food prices globally. To illustrate, while the global food price index rose on average by 10.5 per cent in calendar year 2006 and by 15.2 per cent in 2007, it has increased by a substantial 40.8 per cent in the first four months of 2008 compared to the corresponding period of the previous year. According to the Food and Agriculture Organisation (FAO), 37 countries in the world are presently facing food crisis, 31 of which are in Africa and Asia. Last week (end of May) the World Bank unveiled a US\$ 1.2 billion fast track funding facility to help combat the impact of rising food prices on the poor. World leaders are currently (June 3-5 in Rome) meeting for a High-Level Conference on World Food Security hosted by FAO. The summit comes at a time when food prices have registered an increase of 55 per cent, in the last twelve months. The agenda for the summit

includes measures relating to augmenting crop production, trade, aid, diversion to bio fuels and increasing investment in agriculture science and technology. The overall purpose of the High-Level Conference is to address food security issues in the face of soaring food prices and the new challenges of climate change and energy security. The objective of the Conference is to assist countries and the international community in devising sustainable solutions to the food crisis by identifying the policies, strategies and programmes required to safeguard world food security in the immediate, short and longer term.

Undoubtedly, the current global food situation is very serious and hence, we need to understand the reasons for such dramatic increase in food prices in a short period.

First, it is said that rapid growth of China and India is lifting standards of living of millions of people every year thus putting enormous pressure on global demand. It is also argued that the food basket has changed and is contributing to higher demand. However, a closer scrutiny would reveal that enhanced demand cannot explain a sudden spurt in prices in one year since these two economies have been growing at elevated and accelerating levels for over a decade, if not over two decades. Further, China has been a net wheat exporter and its per capita meat consumption had reached western standards by 2005. India is an exporter or an importer at the margin, except in regard to vegetable edible oils where it

has been a consistent net importer in recent years, and also to a small extent in regard to pulses.

Second, the drought conditions, possibly induced by climate change, in some countries like Australia and Ukraine, may provide some explanation for price increases. It is also likely that dwindling stock levels observed in several countries could have exacerbated the scarcity conditions. Further, administrative measures in some countries to restrict or discourage exports of food products might have stabilised prices in those countries but could have enhanced the prices in some other countries. However, these reasons do not fully explain the widespread global increases in prices of all the commodities at the same time.

Third, it is argued that increases in energy costs are resulting in cost push inflation but contribution of energy costs to overall costs in agriculture may not explain the huge increase in food-prices.

Fourth, related to the current elevated energy prices, there has been diversion of corn and edible oils to bio-fuels, which are significantly influenced by policy mandates. Very clearly this diversion to bio-fuel is a policy induced new reality which coincided with price escalation in precisely those products and hence, is noteworthy.

Fifth, the financialisation of commodity trade and current extraordinary conditions in global financial markets could have influenced the spurt in prices. The recent reductions

in interest rates in the U.S. and the injection of liquidity have resulted in investors seeking new avenues such as commodity markets, in view of the turbulence in financial markets and the low returns in treasuries. The relatively easy liquidity and low interest rates, by themselves, make holding of inventories attractive and thus induce greater volatility to commodity markets. The weakening of the U.S. dollar is also advanced as a reason for the recent volatility in commodity markets, including food items. It is evident that this phenomenon is also now coinciding with the across-the-board rise in food prices.

In brief, while there are demand and supply side pressures on food items, there is considerable merit in the arguments that recent extraordinary increases in food prices are closely linked to the public policy responses to high energy costs in advanced economies, and the turbulence in financial markets and financial institutions. It is said that the impact of such policy induced diversion of food to bio-fuels is significant at this juncture and reflects a preference to fill the fuel tanks of automobiles rather than fill the empty stomachs of people. Similarly, it is sometimes held that the weight accorded to financial stability in public policy may now be at the expense of stability in real sector - especially of sensitive commodities like food. At the same time, there is a general consensus that public policies in regard to food in many economies around the world have not provided adequate incentives to

farmers to increase the supply of food and other agricultural products to comfortably match the growing demand over the medium term.

As regards prospects for the near future, there are severe imponderables, especially relating to the path of future prices of oil; progress in restoration of normalcy in financial markets, especially currency markets; and the extent of slow down in the U.S. economy and its consequential impact on the world economy as a whole. Further, public policies in regard to food, especially diversion to bio-fuel; cross border trading; subsidies; and replenishment or use of buffer stocks; would impact the evolution of prices globally. However, the redeeming feature is that supply response in regard to food grains is possible in a year or two. As per FAO estimates, wheat output is set to achieve a new record in 2008, though against the backdrop of deeply depleted stocks. Global production of rice in 2008 is expected to be marginally better than the previous year and hence, some depletion of stocks held may be expected. Global output of edible oil is anticipated to fall by about three per cent in the current year, and according to FAO, oil seeds and edible oil prices are expected to remain firm.

What is the medium term to long term outlook for food prices at the global level? According to the Agricultural Outlook from OECD and FAO, while agricultural commodity prices should ease from their recent record peaks, they are expected to average well above their mean level of

the past decade. Two days ago (June 3rd) U.N. Secretary-General said, in a speech at the High-Level Conference on World Food Security hosted by FAO that world food output needs to rise by 50 per cent by 2030 to meet rising demand.

The implications of such a scenario in global farm outputs and prices for us should be very clear. With rapid economic growth in our country, the food-consumption will rise in an unprecedented fashion since we are over a billion people. The food basket will also change. We have to augment food supplies within the country since marginal requirements or even a perception of shortfalls in domestic supply in our economy can have significant influence on world prices. As we have over half of the work force depending on agriculture, and as we have scope for increasing productivity in agriculture, there is no reason why we cannot ensure food security for our country, at a minimum. Indeed, India can become the '*Annapoorna*' for the world and I feel that Andhra Pradesh can become the '*Annapoorna*' for India.

In this regard, I can do no better than quote Dr. M.S. Swaminathan, one of our esteemed agricultural scientists, "India has the technological and economic capability to demonstrate how farming system can be adjusted to different weather patterns. It is hoped that at the Rome Conference, Indian representatives will serve as a bright affirming flame in the midst of the sea of despair we see around us".

Indian Situation

Let us now focus on the Indian situation. At the outset, it must be recognised that increase in food prices in India in recent months has been only a fraction of that observed in many other countries. In particular, the global prices of wheat and rice had almost doubled between January and April 2008, while in India the increase has been far less than one tenth of that. In a sense, this vindicates the long-standing public policy of emphasis on a degree of food security in our country, especially due to the vulnerability of large segments of the population. Yet, the prices of food articles spurted in India also in 2006 and 2007. The average annual increase in the Wholesale Price Index (WPI) of food articles was around 7.0 per cent during that period. While increase in the food prices was led by wheat (13.0 per cent) during 2006, rice (6.0 per cent) and edible oil (13.1 per cent) also joined in the price rise in 2007. However, food prices have exhibited some moderation during 2008. The Wholesale Price Index of food articles during 2008-09 (up to May 17, 2008) has increased by around 2.5 per cent as compared with the corresponding period (3.1 per cent) in the previous year.

Of greater interest may be the current outlook for individual commodities, which appears positive for wheat, with significant improvement in procurement. In regard to rice production which stagnated since mid-90s, some turnaround is observed since 2005-06. The prices of edible oil increased sharply

in 2006-07 and spiked during 2007-08. However, some moderation has been observed during the current financial year so far. Due to stagnant levels of production in pulses the demand-supply gap is met through imports, but domestic prices saw a spurt before seeing a decline during the last one year. Prospects for sugar, of which India is amongst the largest producers, appear bright for the current year, since production has risen substantially since 2005-06.

Overall, some abatement of global prices, indication of better domestic supplies and addition to our buffer stocks, along with the series of measures already taken by the Government, on the supply side, are expected to yield results in the months to come. Over the medium term, however, the National Food Security Mission launched about two years ago should yield positive results.

Reserve Bank's Approach to Agriculture

The Reserve Bank's major objectives are to maintain price stability and maintain growth momentum, especially employment generation. In this endeavour, agriculture plays a critical role since agricultural commodities have a relatively significant weight in price indices in our country and also in anchoring inflation expectations. In terms of employment also agriculture dominates, accounting for about sixty per cent of the total, while in terms of GDP its share is less than a third of that. However, the policy space available to Reserve Bank is basically confined to managing aggregate demand through

appropriate stance in regard to growth in money supply, interest and exchange rates and, to some extent, flow of credit through banks. Yet, in view of the criticality of agriculture, the Reserve Bank articulates its approaches to agriculture through the Annual Reports. Let me summarise briefly, the analysis and the views as expressed by the Directors of the Reserve Bank in their Annual Reports during the recent past - say last five years.

(a) Since the mid-1990s, the growth of the agricultural sector has not only been low, but also volatile. The crop yields have shown an unstable trend in recent years. An area of growing concern has been the continued incidence of localised droughts even in good monsoon years. In recent years, the food consumption basket is getting diversified towards value added food products such as meat, poultry, fish, vegetables and fruits. It is important for production to respond to these shifts in consumption.

(b) The share of agriculture in the total gross capital formation (GCF) in real terms has been declining in recent years mainly on account of steady erosion in the share of public investment. The inadequacy of private investment in fulfilling the capital requirements of agriculture has raised concerns about the state of the rural infrastructure, which could turn into a binding constraint on growth.

(c) Several initiatives have been taken in recent years to improve the agricultural credit delivery mechanism. However, some bottlenecks continue to affect the flow of credit to agriculture. To attain a

higher growth in agriculture, the major areas requiring attention in the financial sector are, *inter alia*, spread of insurance against crop losses and facilities for meeting the needs of the rural economy. Newer forms of credit assessment and risk management systems may also have to be put in place, besides upgrading skills, and ushering in changes in attitudes and mind-sets. Information technology has to be used to facilitate transformation in various processes of rural credit.

(d) Efficient and well developed agricultural markets are necessary to enable farmers to deal with inherent risks associated with the perishability of their produce, to get remunerative prices, and to secure smooth access to input supplies. Towards these objectives, the agricultural marketing system in the country needs to be integrated and strengthened. Given the several risks that farmers face, such as future price and monsoon conditions, there is a need to put in place appropriate risk mitigation policies. Accordingly, a comprehensive public policy on risk management in agriculture could promote a more efficient and commercialised agriculture that could also provide relief to the distressed farmers. Rural infrastructure, which includes agriculture research and extension, transport, electricity, and storage structures, not only enhances the productivity of physical resources, but also helps in supply chain management and value addition in agriculture.

(e) Greater focus needs to be placed on agricultural research in the coming

years as the success so far has been restricted to select crops. Efforts to modernise and strengthen the agricultural research system, including the agricultural universities, need to be intensified. The Green Revolution has been the cornerstone of India's agricultural development, transforming the country from one of food deficiency to self-sufficiency. The time is now ripe for a second Green Revolution which will lay emphasis on diversifying the agricultural sector further in order to capture new market opportunities.

As regards flow of credit, in which the Reserve Bank has a role primarily as the regulator of banking system, it has been the Reserve Bank's endeavour to enhance credit flow to agriculture by removing the bottlenecks in credit delivery. The Reserve Bank, on its part, is intensifying efforts in revitalising the rural cooperative credit system, strengthening regional rural banks, providing incentives to commercial banks for investments in rural economy and ensuring an adequate and timely delivery of credit at a reasonable price. The programme for financial inclusion initiated by the Reserve Bank in collaboration with banks and several State Governments, by adopting modern technology, is being intensified and expanded.

Andhra Pradesh

Before concluding this section on India and the Reserve Bank, let me hasten to add that Andhra Pradesh has shown a visionary leadership by putting irrigation and agriculture at the top of

agenda for public policy. Andhra Pradesh has anticipated the emerging criticality of agriculture and designed a policy that is now being followed by many other States in India. The Reserve Bank has been having the privilege of very close cooperation and coordination with the Government of Andhra Pradesh.

Conclusion

Let me conclude by reiterating that globally demand for agricultural products will be very high for the next two to three decades. India will play a dominant role in contributing to both global demand and global supply. Agriculture will be increasingly more diversified and not confined to food crops. Scientific

agriculture is and will be the key for the future. The path ahead is far from smooth, and traversing this path requires constant efforts, vigilance and dedication. I am sure that the knowledge gained from your education will help you in moving forward in your endeavours in life, with determination and confidence.

My dear young graduates in agriculture and horticulture, you have a bright - a very bright - future since India, indeed, the world beckons you. Make the best of it by working hard and purposefully and at the same time being happy. Remember, the ultimate goal is your happiness and the final judge of how you achieve it is your own conscience.