



Agricultural Prices and Markets in India: Improving Market Efficiency for Price  
Discovery

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India accounts for only about 2.4 per cent of the world's geographical area and 4 per cent of its water resources, but has to support about 17 per cent of the world's human population and 15 per cent of the livestock. Agriculture is an important sector of the Indian economy, employing more than 50 per cent of the working force and contributing about 14 per cent of the nation's GDP and 11 per cent of its exports. It is the source of raw material for a large number of industries and the main livelihood for majority of the rural population. Increasing demand for industrialization, urbanization, housing and infrastructure is forcing conversion of agricultural land to non-agricultural uses. Small and marginal holdings of less than 2 hectare account for 85 per cent of the total operational holdings and 44 per cent of the total operated area. The average size of holding (for all operational classes) was 1.16 hectare in 2010-11. Only 45 per cent of the total cropped area (142 million hectares) is irrigated. There are large variations across states and crops with respect to the extent of coverage under irrigation. A majority of the population consists of rural subsistence farmers who depend on rain fed agriculture for their source of income and livelihood.

2. Agricultural prices and markets have tremendous economic and political implications due to their impact on the income and demand of the population in rural areas; inter sectoral allocation of resources; rate of capital formation and the overall development of the sector. Prices are the signals for resources allocation on

the one hand and determining the pattern of consumption and level of living on the other. Price formation in turn takes place in markets where the buyers and sellers of the products transact their businesses.

3. Agricultural marketing encompasses the entire range of activities that direct the flow of goods and services from the primary producer to the ultimate consumer. How well organised these markets are, determines the speed and efficiency of the transaction, and accuracy and reliability of the price. For a well organised and efficient market the prerequisites are physical infrastructural development in terms of market yards/floors, loading and unloading equipment to handle the produce, auction halls, weighing, standardisation, grading, packaging, etc; presence of fairly large number of buyers and sellers of the produce; and free and fast flow of information about the quality and quantity of market arrivals and their prices.

4. There are a variety of agents involved in moving the agricultural produce from the farmer to the consumer. The price at which the farmer sells the produce to a wholesaler, processor or retailer at his farm or at his house is the **farm harvest price**. After an agricultural product leaves the farm-gate, it may pass through one or more wholesale markets and a chain of market intermediaries comprising of the wholesalers, transporters, processors and retailers before reaching the ultimate consumer. A wholesaler is a bulk buyer and operates in the wholesale market situated somewhere between farm-gate and retail market, usually handling large quantity for further sale of the commodity. The price at which the transaction takes place in the wholesale market is the **Wholesale price**. When the commodity reaches a retailer who sells it on to a consumer, the price involved is

called **Retail or Consumer price**. Retail prices are established in transactions where quantities dealt with are relatively smaller than those in wholesale transactions and the buyer is the final consumers of the product.

5. During the last five years very high fluctuations in agricultural product prices have been observed. Further, there have been large differences between the farm harvest prices (which the producer/farmer gets) and the wholesale prices on the one hand and the wholesale prices and the retail prices on the other. While some variations between these prices are understandable due to the marketing and transportation costs, unduly large variations are indicators of poor infrastructural development, weak transmission mechanism and inefficient markets. In such markets the farmer may not be getting a fair share for his produce while the consumer may be paying much higher than what is justified. This calls for a thorough review of the marketing infrastructure and governance system to improve market efficiency and price discovery.

6. In view of the importance of the sector, it has become imperative to have proper system in place for collection, compilation, analysis and dissemination of information relating to agricultural prices and marketing. This in turn calls for collection of reliable and timely information on agricultural prices through sound statistical methods and procedures to derive meaningful conclusions. Harmonization of concepts, definitions and methodology of compilation of data on agricultural prices is important for data aggregation and comparison at intra-country, regional and international levels. As price formation takes place in markets, it is necessary to create an efficient marketing system which (i) fosters competition

among the market players; (ii) reduces the wide divergences between the various price levels across the markets; (iii) transmits the signals from the consumers to the producers speedily with least cost; and (iv) ensures a fair share of the price to the farmer of the produce thus incentivising him to adopt better technology and improve the yield and production.

7. Where the markets do not perform their functions efficiently and effectively, governments intervene in the markets to evolve agricultural price policies. The objectives and choice of instruments of price policy vary across countries and over time, depending on the stage of economic development and the place of agriculture in the national economy. In India, major initiatives have been taken to achieve a fair play of market forces and liberalise the agricultural trade to link the Indian economy with the global market.

8. Agricultural prices cover prices of agricultural products (output prices) and prices of requisites for agricultural production (input prices) at various stages of marketing. The ratio of the prices received by the farmers for the agricultural produce to the prices paid by them for the various commodities bought (for his final consumption, intermediate goods and capital formation in agricultural) is termed as the terms of trade between agriculture and non-agriculture sector.

9. The subsequent sections of the paper address to the system of collection of agricultural prices – farm harvest prices, wholesale prices and retail/consumer prices of agricultural commodities in India, how these prices for some of the major agricultural commodities such as rice, wheat, maize and soybean have behaved in the major producing and consuming areas during the last five years, what is the

agricultural price policy in the country and how has it been functioning over the years, how are agricultural markets organised and governed, analyse the possible reasons for the wide variations in the wholesale and retail prices of agricultural commodities, how have the terms of trade between agriculture and non-agriculture sector behaved during the last decade and what needs to be done to improve the market infrastructure and price transmission mechanism so as to ensure that the price discovery takes place in an efficient market.

## **COLLECTION OF AGRICULTURAL PRICES**

10. The Directorate of Economics and Statistics in the Ministry of Agriculture is responsible for the collection, compilation and dissemination of the price data of agricultural commodities. The price data are collected in terms of (a) farm harvest prices at annual basis, (b) wholesale and retail prices at weekly and monthly basis, and (c) retail / consumer prices of essential commodities on daily basis.

### **Farm Harvest Prices**

11. Farm Harvest price of a commodity is the average price at which the commodity is disposed of by the producer / farmer to the trader at the farm gate or village site during the peak marketing/harvesting period. For collection and compilation of farm harvest prices, a certain number of representative villages are selected in each district depending upon the extent to which the crop is grown in the district. In each selected village, the price at which the commodity is sold by the producer is recorded in a specified form by the price reporter on every Friday during the peak marketing period after the commencement of the harvesting

season. If no sales take place on a Friday, the price at which the commodity was sold last during the week is recorded instead. In cases, where village site transactions do not take place, and the produce is disposed of in the *Mandi*/market, the price recorded is the wholesale price of the specified variety of the commodity and is expressed in terms of rupees per quintal (100 kg) exclusive of gunny bags / container (net weight) and the Farm Harvest Price is obtained by subtracting transportation charges, marketing expenses, *mandi* charges and taxes paid by the farmer per unit quantity from the wholesale price.

12. The existence of different varieties and qualities of commodities with a wide variation in prices makes the task of giving a single harvest price for a commodity for the State as a whole difficult. In each district, however, it may be possible to determine a particular variety which is grown to the largest extent, and that variety is specified for the purpose of reporting the farm harvest prices. If the difference in prices of different varieties is large, it may be necessary to give the farm harvest prices of two varieties separately.

13. The harvesting period and the peak marketing period for each crop may vary widely depending upon the variety of the crop and the nature of cultivation. These periods are fixed in respect of each crop and each state by the State Governments having due regard to the local conditions. The price of a commodity for the State as a whole is the weighted average price, with the district production figures for the concerned year used as weights. However, the average price for the district for each

week are obtained as a simple arithmetic average of the *Tehsil*/sub division prices which in turn, may be the simple arithmetic average of village prices. The average price for the season is the simple arithmetic average of the district prices for each week. The computation of the district average price is done at the district headquarters while the prices for the State as a whole are worked out at State headquarters.

14. If an agricultural producer sells his product in the retail market directly to consumers, the notional farm-gate price received by the producer is estimated by deducting transportation and marketing charges from the retail price. If, however, the product is brought for sale from a wholesale market, and then sold to the final consumer, then deductions from the retail price are made for transportation and marketing charges, and for margins of profit, at both wholesale and retail stages, to arrive at the notional price received by the farmer at the farm-gate.

15. Data on farm harvest prices for 31 commodities are collected by State Agriculture Statistics Agencies (SASA) which are also responsible for the collection of statistics on area, production and yield and supplied to the Directorate of Economics & Statistics, Ministry of Agriculture, Government of India which publishes them in a publication titled "Farm Harvest Prices of Principal Crops in India". The farm harvest prices when multiplied by the production figures of the crops give an estimate of the income of the producers of the commodity, which is equivalent to the contribution of that particular commodity to the gross value of agricultural output.



## **Wholesale Prices**

16. After the farmer has sold the produce, it may pass through one or more wholesale traders in the wholesale markets. Where two wholesale markets are involved, the first may be an assembling market, called a primary wholesale market; and the second may be a distributing market, called a secondary market. Sometimes, one may come across a third category of wholesale market, a terminal wholesale market, from where the produce is exported or sent for processing. It is not necessary that the functions of assembly, distribution and export should necessarily be performed by three separate wholesale markets; a single wholesale market may perform one, two or all three of these functions. A wholesale market may be situated somewhere between farm-gate and retail market, and handles usually large quantity of sales for further sale, distribution or processing of the commodity. Wholesale price is that rate at which a relatively large transaction, generally for further sale, is effected.

17. The Directorate of Marketing and Inspection (DMI) through the AGMARK Networks collects wholesale prices of all commodities brought for sale to the market on daily basis and displays these on their website. The variety and the quality of the products are also specified for collection of price information. Modal price, the price at which maximum transactions take place during the day, is also compiled and reported. Besides the AGMARKNET, the Directorate of Economics and Statistics obtains (i) daily wholesale prices of 12 commodities (rice, paddy, wheat, jowar, bajra, ragi, maize, barley, gram, sugar, gur and khandsari) from 617 market

centres; and (b) weekly wholesale prices (Friday of the week) in respect of 154 agricultural commodities from 700 markets of which prices of 80 commodities are supplied to Office of Economic Adviser in the Ministry of Industry and Commerce for construction of Wholesale Prices Index. The data are collected by price reporters appointed by the State Governments or Agricultural Marketing Committees and forwarded to the State Directorates of Economics and Statistics (DESs). The Wholesale Price Index (WPI) on base 2004-05 is compiled by the Office of the Economic Adviser, Ministry of Commerce and Industry. These indices are at all-India level and are compiled at monthly intervals.

#### RETAIL PRICES

18. Retail prices involve transactions in which the buyers are the final consumers of the product and the quantities dealt with are relatively smaller than those under wholesale transactions. Retail prices are used for constructing consumer price indices, undertaking studies on cost of living, and for determining the cost of living allowances for wage earners. Retail prices of agricultural commodities are collected on a weekly basis from 87 market centres in respect of 88 commodities (49 food and 39 non-food) by the staff of the State Market Intelligence Units, State Directorates of Economics and Statistics (DESs) and State Department of Food and Civil Supplies.

18. The Labour Bureau, Ministry of Labour, Government of India has been entrusted with the task of bringing out the consumer price indices for industrial

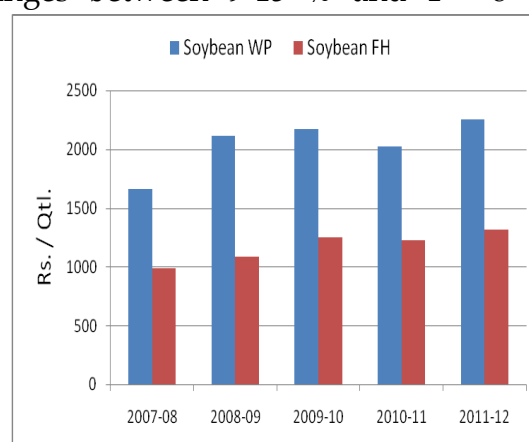
workers, agricultural labourers and rural labourers for which collection of retail prices of various commodities for different population classes is undertaken. The retail prices of a few commodities are collected through the National Sample Survey Office (NSSO) from a set of 422 villages for building up the consumer price index numbers. The index numbers for agricultural labourers are compiled and published for 15 States and at All-India basis. The Directorate of Economics and Statistics collects daily retail prices of vegetables, fresh fruits, fish, livestock products and food grains from 90 centres and weekly retail prices of agricultural commodities from 215 centres. The Consumer Price Index (CPI) is a measure of the average change over time in the prices paid by the consumers for a basket of consumer goods and services. Currently, there are three population segments specific CPIs namely, CPI- IW for industrial workers, CPI-AL for agricultural labour, and CPI-RL for rural labour released at national level by the Labour Bureau. Base year for CPI-IW is 2001 where as for CPI-AL/RL the base year is 1986-87. CPI\_IW is released at each of the selected 78 centres and all-India and CPI-AL/RL is available at specified 20 states and all-India. Price data for CPI-IW are collected by State Government officials on a part time basis and data collection for CPI\_AL/RL is undertaken by the Field Operations Division (FOD) of the National Sample Survey Office (NSSO).

19. Population segment specific CPI numbers do not reflect the behaviour of prices faced by the entire population in rural and urban areas of the country. Accordingly, the Central Statistics Office (CSO) in the Ministry of Statistics and Programme Implementation has started compiling a new series of CPI from 2010 for

the entire urban population, viz. CPI-U, and for the entire rural population, viz. CPI-R, which reflect changes in the price levels of various goods and services consumed by the respective population in urban and rural areas. These new indices are compiled at State/UT and all-India levels. Price data collection for CPI-U and CPI-R is done by NSSO and Department of Posts respectively.

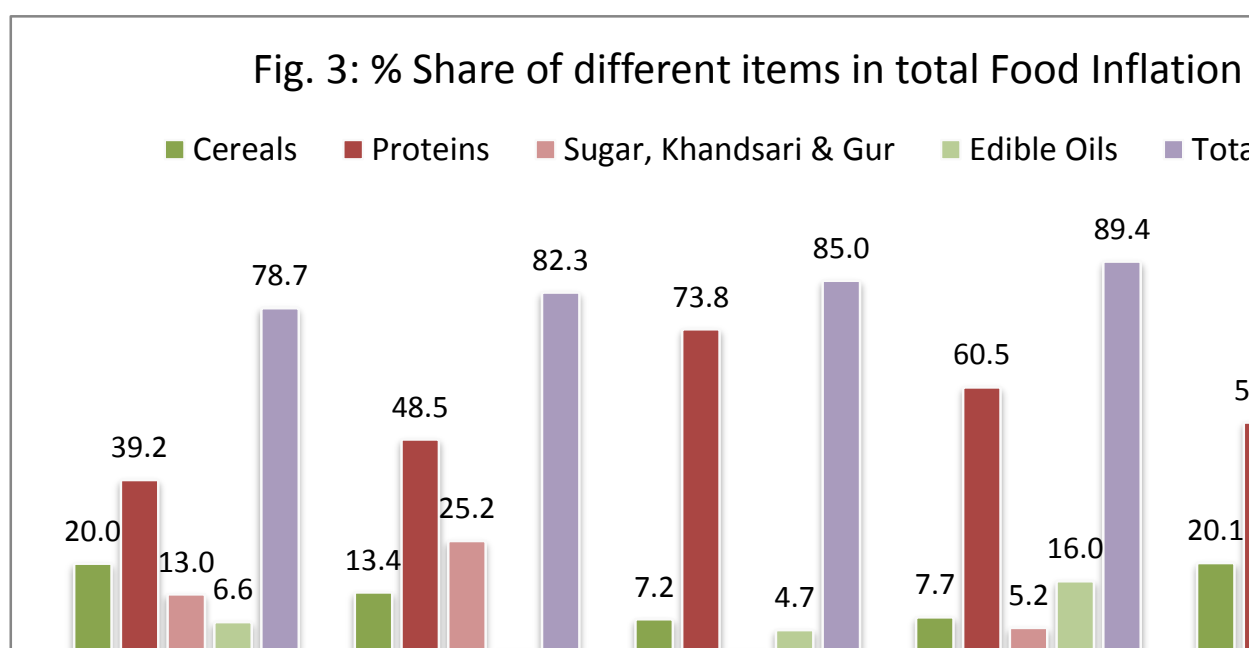
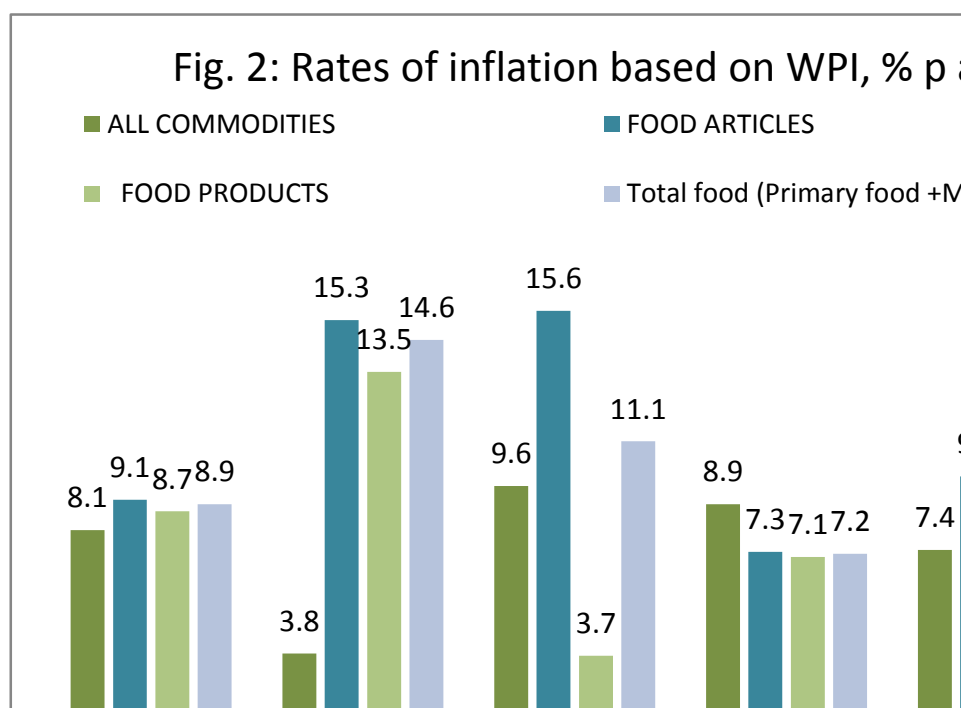
## PRICE BEHAVIOUR

20. Normally wholesale price is expected to be slightly higher than the farm harvest price. This is revealed by Fig.1, where all India simple averages of states farm harvest and wholesale prices of rice, wheat, maize and soybean for the years 2007-08 to 2011-12 have been plotted. The difference between farm harvest and wholesale prices in the case of maize and wheat ranges between 9-15 % and 1 - 8 % respectively, which can be explained by the transportation and marketing charges. However, in the case of rice (12 to 23%) and soybean (40-49%) this difference is very large which cannot entirely be attributed to transportation and marketing charges.



There seem to be some other factors like marketing infrastructure, storage, processing, etc having their role in the variations in prices in different markets. Processing facilities (say for soybean and rice) near the farm gate or source of produce is expected to give better realisation to the farmers.

21. The rate of inflation based on the wholesale price index during the year 2012-13 in food articles was 9.9 per cent and in food products 8.1 per cent. Food articles and food products account for 14.34 and 9.97 per cent respectively of the total weights in WPI. The aggregate rate of inflation for food products and food articles works out to 9.3 per cent as against 7.4 for all commodities. Food inflation based on the consumer price index was 10.2 per cent where food accounts for 49.71 per cent of the total weight. It is generally seen that the retail prices are much higher, sometimes more than twice, than the wholesale prices; however this phenomenon is not fully captured by the respective indices. This is partly due to the different base period for the two series (2005-05 for the WPI and 2010 for the CPI) and partly due to different weighting diagrams. The share of food inflation in the over all inflation (all commodities) was 34.5 per cent in 2012-13 as against 22.5 per cent in 2011-12 and 95.3 per cent in 2009-10. Cereals, pulses, fruits & vegetables, milk, meat and eggs, sugar and edible oils accounted for 91.6 per cent of the inflation in total food articles and food products in 2012-13 as against 89.4 per cent during the previous year. While the share of proteins based inflation is coming down, share of cereals, sugar and edible oils has increased significantly as can be seen from Fig. 3.



22. There are multiple agencies involved in data collection on prices. Different agencies have different objectives in the collection of data on prices. Prices collected from different markets may not be comparable due to market conditions, transport costs, qualities reported etc.. There is a need to have some coordination between agencies/departments reporting data on prices. Periodic review of centers and

markets for collection of prices data is necessary to keep pace with changing ground realities, emerging production and consumption centers, importance of the commodities in the consumption basket and non-reporting by some centers. The infrastructure support including manpower required for improving the quality of data is necessary. Presently, AGMARKNET excludes about 4000 Wholesale markets and 21000 Primary Rural Markets from its ambit. Further, there are concerns about the data quality. Therefore, better coordination between state and central agencies, use of information technology-PDAs/Mobiles, capacity building in new techniques and formats, and linking up websites etc. are called for.

## **AGRICULTURAL PRICE POLICY**

23. Agricultural price policy aims to achieve the twin objectives of assuring remunerative prices to the farmers for their and providing food grains and other specified commodities to the consumers at reasonable prices. The broad framework of the policy was specified in the terms of reference of the Agricultural Price Commission (APC) which was set up in 1965 and renamed as Commission for Agricultural Costs and Prices (CACP) in 1984, to advise the government on a regular basis, for evolving a balanced and integrated price structure in the agriculture sector. While formulating the price policy, the Commission is required to keep in view not only the need to provide incentives to the farmers for adopting the new technology and maximising production but also developing a production pattern consistent with the overall needs of the economy, the likely effect of the price policy on cost of living, levels of wages and industrial cost structure. It is also required to ensure that

the gains of use of technology and public investment in agriculture are fairly shared between the farmers and the consumers. The agricultural price policy was again subjected to a review after the launch of economic reforms in 1991 and on India's becoming a signatory to the World Trade Organisation. Presently, Government announces minimum support prices for 24 crops including seven cereals (paddy, wheat, barley, jowar, bajra, maize and ragi); five pulses (gram, arhar/tur, moong, urad and lentil); eight oilseeds (groundnut, rapeseed/mustard, toria, soyabean, sunflower seed, sesamum, safflower seed and nigerseed); copra, raw cotton, raw jute and virginia flu cured (VFC) tobacco. Besides the MSP, it operates Market Intervention Scheme (MIS) for horticulture crops which are not covered under minimum support price scheme and are perishable in nature on the request of State governments when there is a drastic drop in the market prices of such crops to ensure a remunerative price to the farmers. Government distributes rice, wheat and sugar under Public Distribution System at subsidised prices to the poorer sections of the society. It maintains buffer stocks and conducts procurement at MSP and open market purchases and sales of some commodities through public agencies such as NAFED, NCCS etc, at market prices during the peak arrival period.

24. The Minimum Support Price (MSP) policy has in recent years started encountering problems because of surpluses of rice and wheat and have resulted into excessive built up of stocks with the Food Corporation of India. Even deficit states like Bihar, Assam, Eastern U.P. have started generating surpluses of certain cereals. As a result of operation of the MSP and procurement by the government



agencies, private traders have not been able to play their role particularly in respect of two major cereals, namely wheat and rice that account for over 70 per cent of total food grain production in the country. Under the MSP scheme, prices of major agricultural commodities are not only exogenously determined but these prices are defended through nodal procurement agencies like FCI, in the process the private trade has been marginalized.

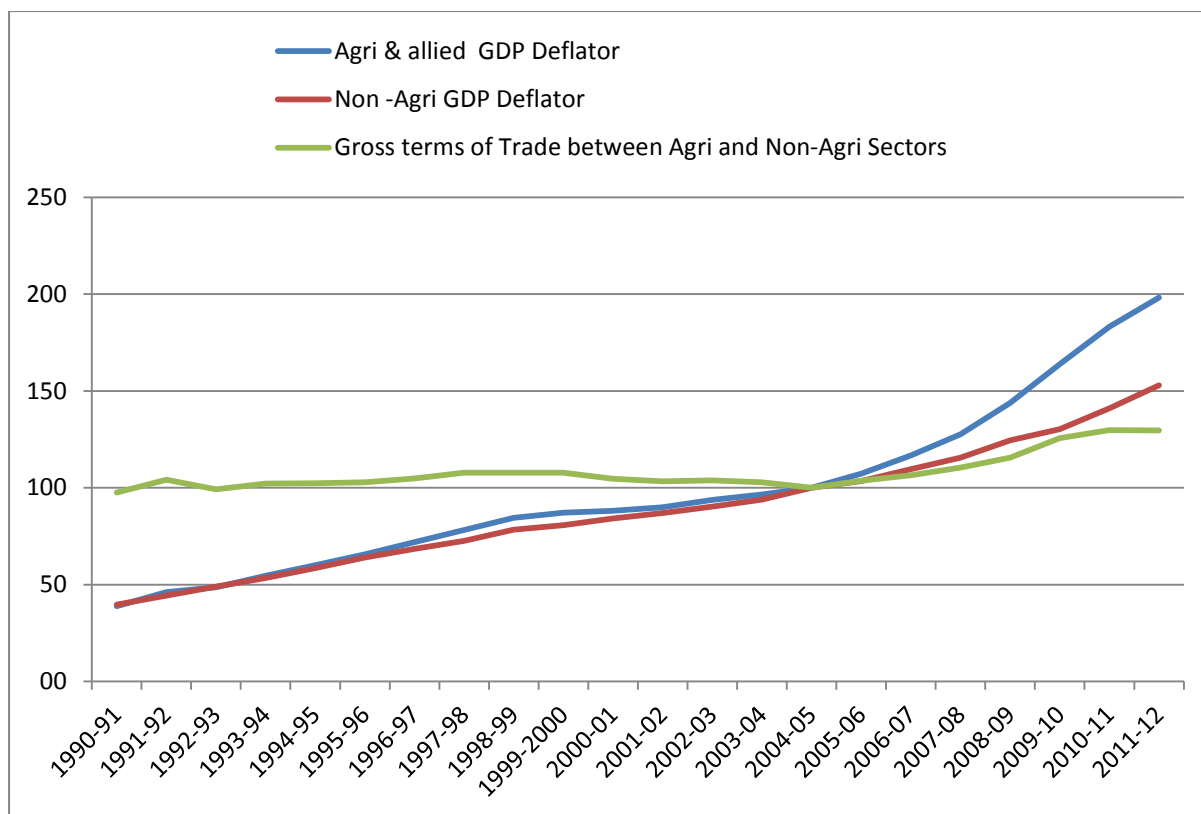
## TERMS OF TRADE BETWEEN AGRICULTURE AND NON-AGRICULTURE Sectors

25. Terms of Trade measures the overall rate of exchange at which trade takes place between two countries or sectors. In the context of trade between the agricultural and non-agricultural sectors the term represents the relationship between the prices received by the farmers for their produce and the prices paid by them for the goods purchased by them for their consumption, agricultural inputs and capital formation in agriculture sector. In order to capture the general price behaviour, indices of prices of commodities sold and bought by the farmers are computed and the ratio between the indices of prices received and prices paid by the farmers reflects the overall rate of exchange between agricultural and non-agricultural sectors. The last time this exercise was done in 1990-91. Since then the production pattern and input mix in the agriculture sector have changed substantially as can be seen from the value of output of the different segments of the agriculture sector. Significant changes have taken place in the composition and relative importance of the commodities sold and purchased by the farming

community also. There are huge differences in the productivity and prices of different agricultural commodities prevailing across states. Hence, the terms of trade compiled at national level do not reflect the state wise differences in prices received and prices paid by the farmers for their produce and inputs respectively. Therefore, a thorough re-examination of the methodology, commodity composition and weighting diagram of terms of trade was called for. The Government has accordingly constituted a Working Group to revisit the whole gamut of the issues in terms of trade between the agriculture sector and the non-agriculture sector.

26. **Gross Terms of Trade:** The Gross Terms of Trade in the inter-sectoral context has been defined as the ratio of agricultural and non-agricultural GDP deflators (i.e.  $\text{GDP at current prices} / \text{GDP at constant price}$ ) and have been compiled by Joshi (1992), Hazell, Misra and Hazell (1996) and Acharya (2001). On the basis of GDP deflators the Gross ToT between the agriculture and non agriculture sectors is given in Fig. 4. It is observed that after 2004-05 prices of agriculture commodities have risen at a faster rate than that of non-agriculture commodities / products, thereby resulting a favourable terms of trade for the agriculture sector.

Fig. 4: Gross Terms of Trade between Agriculture and Non-agriculture Sectors in India.



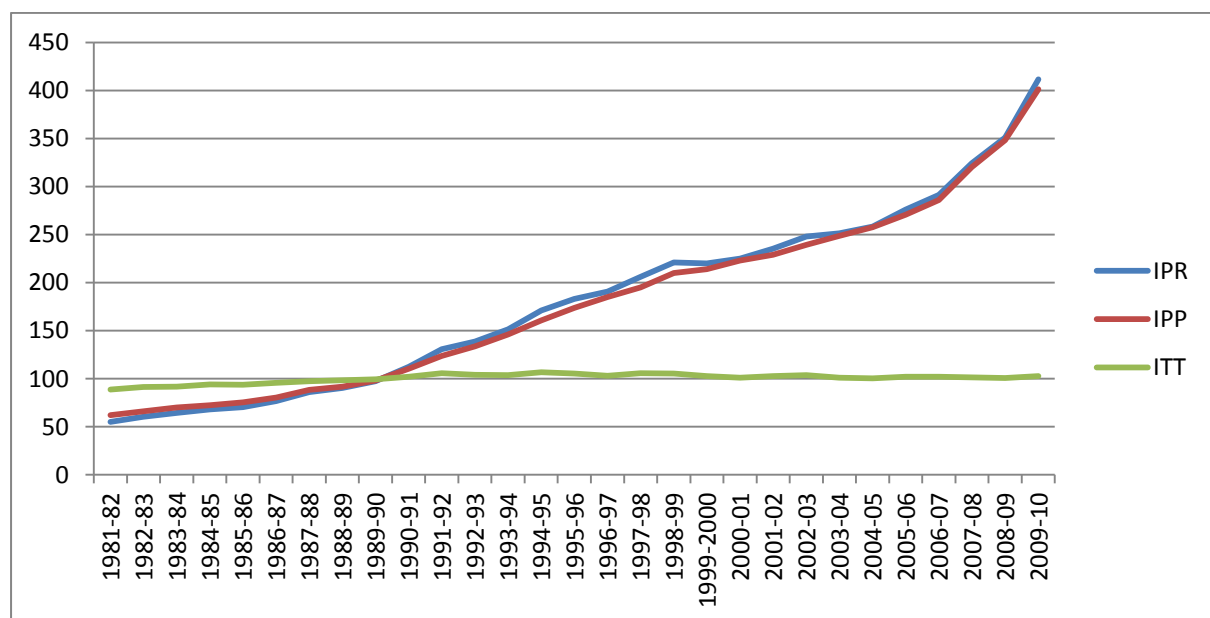
27. However, if one goes for a more scientific analysis by constructing composite price indices for groups of agricultural commodities/products sold by agricultural sector to non-agriculture sector and price indices of commodities/ products purchased by agriculture sector from non-agricultural sector for their intermediate and final consumption, and capital formation in agriculture which is termed as the **Net Barter Terms of Trade** between the agricultural and non-agricultural sector and computed by the following formula, one finds quite different results, as shown in Fig. 5.

$$\text{Index of Terms of Trade} = \frac{\text{Index of Price Received for Farm Products}}{\text{Index of Price Paid for Farm Inputs, Final Consumption and Capital Investment}} \times 100$$

It is observed that both prices received by the farmers for their produce sold to non - agriculture sector and prices paid by them for the various agricultural inputs, capital

formation and final consumption have moved upward but by and large maintained a uniform pace. Indices of Prices of agricultural commodities sold by the farmers have been marginally higher than indices of prices paid by the farmers right from 1990-91. The difference between the two series results is perhaps due to an old base (i. e. 1990-91) being adopted for the net barter ToT and is being looked into by the WG of which the author is the Member Secretary.

Fig. 5: Net Barter Terms of Trade between Agriculture and Non-agriculture sector



## AGRICULTURAL MARKETING

28. Agricultural marketing encompasses the entire range of activities that direct the flow of goods and services from the primary producer to ultimate consumer. Agricultural marketing in India is largely governed by the Agricultural Produce Marketing Committee Acts of the state governments. The idea behind setting up of the agricultural markets and regulating them under the APMC Act was to bring the

buyers and sellers to a common place and subject the market to the conditions of perfect competition so that no one unduly influences the market prices. The purpose of state regulation of agricultural markets was to protect the farmers from the exploitation of intermediaries and traders and to ensure fair prices and timely payment for their produce. Over a period of time, these markets have, however, acquired the status of restrictive and monopolistic markets, providing little help in direct marketing, organised retailing and smooth raw material supplies to agro-industries. Exporters, processors and retail chain operators cannot procure directly from the farmers as the produce is required to be channelised through regulated markets and licensed traders. There is, in the process, an enormous increase in the cost of marketing and farmers end up getting a low price for their produce. State-controlled markets have assumed monopolistic tendencies and it is preventing private investment in the sector. Consequently there are large post-harvest losses, estimated to be of the order of 4-6 per cent in food grains and 6-18 per cent in fruits and vegetables.

29. The agriculture sector needs well-functioning markets to drive growth, employment and economic prosperity in rural areas which in turn requires large investments in the development of post-harvest, cold-chain and logistic infrastructure. An appropriate regulatory and policy environment is necessary to attract investment from the private sector in to this infrastructure. Further, enabling policies are needed to encourage the procurement of agricultural commodities directly from farmers' fields and to establish effective linkage between the farm production and the retail chain and food processing industries. Accordingly, in 2003

Government of India framed a model APMC Act in consultation with the state governments to suitably amend their respective APMC Acts on the lines of the model Act to promote investment in marketing infrastructure, encourage the corporate sector to undertake direct marketing and to facilitate a national integrated market. The model Act provides for the establishment of private markets/yards, direct purchase centres, consumer/farmers' markets for direct sale and promotion of Public-Private Partnership (PPP) in the management and development of agricultural markets, and promotion of grading, standardisation and quality certification of agricultural produce in India.

30. The Ministry of Agriculture has also taken the initiative to promote modern terminal markets for fruits, vegetables and other perishables in important urban centres in India. These markets would provide state-of-the art infrastructure facilities for electronic auction, cold chain and logistics and operate through primary collection centres conveniently located in producing areas to allow easy access to farmers. The terminal markets are envisaged to operate on a 'hub-and-spoke' format, wherein the terminal market (the hub) would be linked to a number of collection centres (the spokes).

31. Marketing Research and Information Network (AGMARKNET): Launched in March 2000 it aims at linking important agricultural produce markets spread all over India and the State Agriculture Marketing Boards/ Directorates and the DMI for effective exchange of market information for better price discovery. Information on daily prices and arrivals of different commodities and varieties prices are

disseminated through the portals. Information on wholesale prices and arrivals in respect of 300 commodities and 3000 varieties are being disseminated through the portal on a daily basis. More than 3200 markets have been linked to the Central AGMARKNET Portal and more than 2000 markets have reporting data during the year 2012. In addition to price, market-related information like accepted standards , labelling, sanitary and phyto-sanitary requirement, physical infrastructure of storage and warehousing, marketing laws, fees payable, etc.is provided through the portal. There is a need to develop time series data on marketing infrastructure for each market and then analyse whether markets with better infrastructure were instrumental in efficient transaction and fair price discovery.

32. There are many companies which are directly involved in buying and selling of agricultural produce, seeds, farm implements, tractors, farm chemicals etc. Exporters, processors, retail chains, fertiliser companies/cooperatives, seeds producers, farm equipments manufacturers etc. are some of the examples of such companies/agencies. There is a need to devise a mechanism where under these companies/organisations can be mandated to directly file the production, sale/utilisation and price data on the portals. The formats and periodicity of filing of such data can be prescribed by the Central/State Govt. This, besides making the data available in time, can reduce the cost of data collection substantially. Further, by offering slots to these organisations to advertise their products and/or services on the portal, Govt. can generate some revenues which can further supplement the cost of data collection.

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Table 1: All India average Farm Harvest and wholesale Prices of select commodities

	Maize			Wheat			Soybean			Rice		
	WP	FH	FH/WP %	WP	FH	FH/WP %	WP	FH	FH/WP %	WP	FH	FH/WP %
2007-08	828	753	91	1080	1041	96	1661	986	59	1323	1165	88
2008-09	871	789	91	1160	1103	95	2112	1082	51	1578	1354	86
2009-10	1018	998	98	1315	1238	94	2173	1253	58	1786	1502	84
2010-11	1067	978	92	1351	1238	92	2021	1222	60	1881	1450	77
2011-12	1283	1094	85	1300	1283	99	2255	1313	58	1862	1544	83