

ECONOMICS AND STATISTICS

The programmes and activities undertaken by the Directorate of Economics and Statistics (DES) essentially seek to serve the purpose of creating a database on different facets of agriculture. It also serves as the nodal agency to examine the reports submitted by the Commission for Agricultural Costs and Prices (CACP) on price policy on principal crops and other aspects of agriculture. The price policy for agricultural commodities is an integral part of India's overall agricultural policy. The MSP for important cereals, pulses, oilseeds, and other commercial crops, namely, cotton, jute and sugarcane, are fixed by the Government every year on the basis of the recommendations made by the CACP. One of the important factors considered by the CACP in making its recommendations on MSPs for different crops is the cost of cultivation/production for which the database is provided by the DES. An analysis of various price policy issues in the emerging socio-economic environment requires advance information on the production of different crops, the supply-demand scenario, and regular monitoring of price movements in both the domestic and international markets.

4.2 In keeping with the need to adopt a holistic approach to the implementation of individual schemes with inter-related objectives, the ongoing plan schemes of the DES were merged into three broad umbrella schemes during the Tenth Plan. These are: (i) Improvement of Agricultural Statistics; (ii) Studies on Inputs for Agricultural Economic Policy and Development; and (iii) FASAL. The details of these schemes, with special reference to the component schemes, are given below.

4.3 **Improvement of Agricultural Statistics Scheme:** The basic objective of the scheme is to collect and improve the quality of agricultural statistics of principal agricultural crops and horticultural crops. This scheme had funding pattern of 50:50 between the Central and State Governments under the centrally-sponsored scheme. However, it has been decided to reclassify this scheme as a central sector scheme from 2007-08. The scheme has four components, namely:

4.4 (a) **Timely Reporting Scheme (TRS) on Estimates of Area and Production of Principal Crops :** The objective of this component is to obtain estimates of area of principal crops, in each season, with a break-up of area under irrigated/non-irrigated and high yield crops by conducting a priority enumeration of 20 per cent of villages selected randomly, within a specific time-frame. The States are required to furnish these estimates by 30th November for Kharif crops and by 30th April for Rabi crops. This component is under implementation in 16 land record states as also in the UTs of Delhi and Puducherry.

4.5 The estimates of area of all principal crops for Kharif and Rabi seasons as obtained under the TRS were used for preparing the official advance and final estimates for the agricultural years 2005-06 and 2006-07. The performance of the implementation of the component is being closely monitored through quarterly progress reports and seasonal reports.

4.6 (b) **Improvement of Crop Statistics:** The objective of this component is to improve the quality of statistics on area and production of crops through supervision and monitoring. Under this component, a sample check of area enumeration and crop-cutting experiments is undertaken. About 10,000 villages are covered and approximately 31,000 experiments are conducted every year. These samples are equally shared by the central agency (i.e., the National Sample Survey Organisation) and the State Agricultural Authorities. This programme is being implemented in all TRS States and in the UT of Puducherry. The performance of the implementation of this component also is being closely monitored through quarterly and seasonal progress reports as in the case of the TRS.

4.7 (c) **Establishment of an Agency for Reporting of Agricultural Statistics (EARAS):** This component is being implemented in the permanently settled States of West Bengal, Kerala, Orissa; and in the North-Eastern States of Nagaland, Sikkim, Arunachal Pradesh and Tripura. Under this component, an agency has been established in these states for generating estimates of area and production of principal crops and land-use statistics, through complete enumeration of 20 per cent of the villages every year and the conduct of crop-cutting experiments. The estimates of area/production of all principal crops for Kharif and Rabi seasons as obtained under the EARAS were used for preparing the official advance and final estimates for the agricultural years 2005-06 and 2006-07. The performance of the implementation of this component also is being closely monitored through quarterly and seasonal progress reports.

4.8 (d) **Crop Estimation Survey of Fruits, Vegetables and Minor Crops:** This component is implemented to generate estimates of area and production of fruits and vegetables in India. This component is under implementation in 11 States and a total of 14 crops are covered (seven fruits and seven vegetables). The methodology developed by the Indian Agriculture Statistical Research Institute (IASRI) is used for generation of these estimates.

4.9 The National Statistical Commission had recommended that the present methodology being followed for the crop estimation survey of fruits and vegetables should be replaced by an alternative cost effective methodology. Accordingly, the IASRI has been entrusted with a project for conducting a study in the two states of Maharashtra and Himachal Pradesh. The objective of the study in the two States is for testing the alternative methodology developed by them with the aim of covering all important fruit and vegetable crops in all the major States in order to have reliable estimates of area and production at the all-India level.

4.10 **Activities in the North-East:** The following components of the 'Improvement of Agricultural Statistics' scheme are under implementation in the North-Eastern Region: (a) TRS on estimates of area and production of principal crops in Assam; an amount of Rs 0.44 crore has been provided during 2006-07; (b) improvement of crop statistics is under implementation in Assam with an allocation of Rs 0.13 crore during 2006-07; (c) the EARAS scheme is under implementation in Arunachal Pradesh, Nagaland, Tripura and Sikkim, with an allocation of Rs 0.83 crore during 2006-07. The scheme details are given in **Annexure 4.1**.

4.11 **Studies on Inputs for Agricultural Economic Policy and Development:** The schemes under implementation are briefly discussed below:

4.12 (a) **Comprehensive Scheme for Studying the Cost of Cultivation of Principal Crops in India:** The main objectives of the scheme are:

- Collection and compilation of field data on cost of cultivation and cost of production in respect of 30 principal crops; and
- Generation of State-wise and crop-wise estimates of Cost of Cultivation (CoC) and Cost of Production (CoP) of crops.

4.13 The scheme is under implementation in 19 States, namely, Andhra Pradesh, Assam, Bihar, Chattisgarh, Gujarat, Haryana, Himachal Pradesh, Jharkhand, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Orissa, Punjab, Rajasthan, Tamil Nadu, Uttar Pradesh, Uttarakhand and West Bengal, through 16 universities/colleges. The scheme covers 30 crops, i.e., paddy, wheat, jowar, bajra, maize, ragi, barley, moong, urad, arhar, gram, masur, peas, groundnut, rapeseed and mustard, niger seed, soya bean, sunflower, sesamum, cotton, jute, sugarcane, Virginia Flue Cure (VFC) tobacco, onion, potato, ginger, tapioca, arecanut, coconut and black pepper.

4.14 During 2006-07, an amount of Rs 17.54 crore (including Rs 0.30 crore for headquarters) has been earmarked for the scheme. Of this amount, Rs 16.78 crore was released till 31 December 2006.

4.15 (b) **Planning and Management of Agriculture Scheme:** Two projects are under progress under the scheme during 2006-07. The project titled Development and Application of Extended Range Forecast System (ERFS) for Climate Risk Management in Agriculture is being undertaken by the Indian Institute of Technology (IIT), Delhi. The study 'To investigate the causes of variation between official and trade estimates of cotton production', by the IASRI, Pusa, New Delhi, undertaken during 2006-07 is funded under the scheme. For 2006-07, an amount of Rs 3.41 crore has been provided for the scheme of which Rs 0.13 crore was incurred till 31 October 2006.

4.16 (c) **Agro Economic Research (AER) Centres:** The scheme is under implementation through 12 AER centres and three regional units fully funded by the Government of India. During 2005-06, about 45 such studies were completed and during 2006-07, 40-45 research studies are proposed. On an average, 40-45 research studies

relating to various economic problems in agriculture, animal husbandry, water management and allied areas are completed annually by these Centres.

4.17 (d) Strengthening of Agricultural Statistics and Agricultural Policy Formulation: The objective of this scheme is to streamline the system of agricultural statistics and policy formulation by strengthening the research techniques and upgrading the skills of personnel involved in the compilation and analysis of data. A National Workshop on Improvement of Agricultural Statistics was held on 7th and 8th July 2006. The workshop discussed various issues including the need to reduce the divergence in successive estimates of crop production, increased application of remote-sensing technology in the agriculture sector, better conduct of agricultural census, improving the horticulture database and checking non-reporting of wholesale and retail prices.

4.18 The concept of FASAL observations seeks to strengthen the current capabilities of early season crop estimation capabilities from econometric and weather-based techniques with remote-sensing applications. The FASAL project envisages to institutionalise the diverse use of remote sensing in agriculture with a special focus on crop inventory assessment. This scheme was approved in August 2006. Under this scheme, Rs 0.10 crore has been released till 31 December 2006. Technical and advisory committees have respectively been constituted for the implementation of FASAL.

4.19 Market Intelligence and Price Analysis: The retail prices of essential commodities from 87 designated centres are compiled by the Retail Price Section (RPS) and disseminated in the form of a weekly bulletin of retail prices of essential commodities. The DES also collects and compiles wholesale prices, international prices and market arrivals of essential commodities on a weekly/monthly basis for 700 centres spread all over the country. Out of these price quotations, about 233 quotations on wholesale prices are disseminated through e-mail to the Office of the Economic Adviser, Ministry of Industry, for construction of the Wholesale Price Index (WPI) on a weekly basis.

4.20 Publications: In order to disseminate various agricultural statistics, the DES brings out a number of publications. Important publications include:

- *Agricultural Situation in India* (monthly).
- *Krishi Sameeksha* (Hindi) (monthly).
- *Agricultural Wages in India*.
- *Agricultural Statistics at A Glance*.
- *All India Index Numbers of Area, Production and Yield of Principal Crops*.
- *Land Use Statistics at A Glance*.
- *District-wise Area and Production of Crops in India*.
- *Cost of Cultivation of Principal Crops*.

4.21 Support Price for Agricultural Commodities: As mentioned earlier in this report, the Government announces the MSPs for each season for major agricultural commodities. The support price for various agricultural commodities are decided taking

into account the recommendations of the CACP, the views of State Governments and Central Ministries as well as other relevant factors which, in the opinion of the government, are important for fixation of support prices.

4.22 The MSPs of Kharif crops in 2006-07 were announced on 27 July 2006. The MSPs of oilseeds and pulses have also been fixed. The MSP of niger seeds has been raised by Rs 20 per quintal, followed by an increase of Rs 10 per quintal in sesamum, arhar and soya bean (yellow), while the MSP of jowar, bajra and ragi has been raised by Rs 15 per quintal in each case. An increase of Rs 10 per quintal has been given for paddy. An additional incentive bonus of Rs 40 per quintal is payable on the procurement of paddy between 1st October 2006 and 31 March 2007. The MSP of cotton (both varieties) has been raised to Rs 10 per quintal.

4.23 The MSPs of Rabi crops of 2006-07, to be marketed in 2007-08, were announced on 27 and 30 October 2006. The MSP of wheat has been fixed at Rs 750 per quintal, as against Rs 650 per quintal during the previous year. The MSP of barley has been raised by Rs 15 per quintal and that of gram and masur (lentil), by Rs 10 per quintal.

4.24 Recent trends in the MSPs of different crops are indicated in **Annexure – 4.2**.