

## **Real Economy**

### **I. Agricultural Growth**

The growth performance in agricultural sector was somewhat subdued in the 1990s, with the real growth rate at a modest 2.9 per cent during 1991-2000 as against a higher growth of 3.9 per cent during 1980s.

Within the agricultural sector, the deceleration in non-food grain production was sharper.

- The deceleration in agricultural growth resulted from a near stagnation in crop yields and falling public sector capital formation.

### **II. Slow-down of Agricultural Growth in 1990s**

The major reasons for the slowdown of agricultural growth in the last decade are as follows:

#### ***1. Inadequate Irrigation Cover:***

Speedy adoption of improved technology continues to be constrained by inadequate irrigation cover.

Only 39.2 per cent of the gross cropped area in the country was under irrigation in 1998-99.

- The low irrigation coverage could be in turn attributed to the declining priority in public expenditure.
  - i. For instance, the share of public expenditure on irrigation and flood control to total expenditure fell from 10 per cent during Sixth Plan (1980-85) to 6.5 per cent during the Eighth Plan (1992-97) and is estimated to remain at that level during the Ninth Plan period.
- The performance of the agricultural sector has also been affected by the skewed irrigation coverage across various states and crops.
  - i. For instance, while 92.2 per cent of gross cropped area was irrigated in Punjab in 1998-99, in Maharashtra only 15.4 per cent of the cultivated area was irrigated.
  - ii. Similarly, distribution of irrigation facilities across crops is also equally skewed. For instance, while 85.5 per cent of the

cultivated area for wheat and 52.3 per cent for rice was irrigated, only 12.1 per cent of the cultivated area under pulses was irrigated in 1998-99.

- The low irrigation cover for various crops has led to severe rainfall dependency thereby imparting variability to production in the latter part of the 1990s.

## ***2. Improper Adoption of Technology***

Unsatisfactory spread of new technological practices including adoption of high yielding varieties (HYV) of seeds and usage of fertilisers and pesticides, inadequate spread of farm management techniques and other practices such as soil conservation and crop rotation.

- The increased high yield risks associated with HYV seed cultivation without adequate irrigation facilities has obstructed the speedy adoption of HYV seed cultivation across regions and crops. For instance, the area under HYV seeds decelerated from 8.1 per cent per annum in 1980s to 4.4 per cent in the 1990s.
- Similarly, there has been a decline in the growth rate of consumption of fertilisers to 4.3 per cent in the 1990s from 7.8 per cent in the 1980s, with wide variation across states.

## ***3. Unbalanced Use of Inputs***

- Increasing subsidies on some inputs like fertilizers resulted in skewed and unsustainable usage of such inputs. For example, heavy subsidies on urea resulted in unbalanced use of Nitrogen (urea), Phosphorous (phospate), Potassium (potash), fertilizers in the ratio of 8.5: 3.1:1 in 1998-99 as against the desirable ratio of 4:2:1. This aggravated deficiency in use of micro-nutrients.
- Subsidised electricity for irrigation purposes resulted in proliferation of ground water drawing machinery such as pump sets and tube wells. This had adverse implications for ground sustainability besides leading to doubts about the actual benefits derived by small farmers with such capital intensive techniques.
- Heavy subsidies on electricity and diesel led to the cultivation of water intensive crops like wheat and rice, with skewed consumption

of nitrogenous fertilizers leading to an unsustainable cropping pattern.

- There are apprehensions that the boost in output from subsidy-stimulated use of fertilisers, pesticides and water may partly be at the expense of deterioration in aquifers and soil, and hence is environmentally unsustainable. This also explains the rising costs and slackening of growth and productivity in agriculture.

#### ***4. Decline in Public Investment***

- The secular decline in the rate of public investment in agriculture also resulted in the subdued performance of Indian agriculture in the 1990s. The ratio of public sector capital formation in agriculture to Gross Public Sector Capital Formation declined from 17.7 per cent in 1980-81 to 7.1 per cent in 1990-91 and further to 4.9 per cent in 2000-01.
- Decelerating Public Sector Capital Formation in agriculture, which primarily goes towards major irrigation (90 per cent of the public sector capital formation), has serious implications for the private sector investment in minor irrigation due to complementarity between the two.
- Notwithstanding the rise in private sector capital formation in agriculture, the total capital formation in agriculture as a proportion of GDP declined due to the falling share in public capital formation in agriculture. Thus, overall, Capital Formation in agriculture as a ratio of GDP originating from agriculture also declined from 8.5 per cent in 1980-81 to 6.1 per cent 2000-01.

#### ***5. Credit Delivery System***

Lack of adequate credit for investment has been a crucial impediment to the expansion of acreage under HYV seeds and the optimum dose of inputs.

- Although the annual compound growth rate of direct institutional credit to agriculture and allied activities improved marginally from 12.0 per cent during the 1980s to 12.7 per cent during the 1990s, at the disaggregated level there has been a deceleration in the scheduled commercial banks' disbursement of direct finance to small farmers from 15.1 per cent in the 1980s to 11.0 per cent in the 1990s.

- Disbursement from scheduled commercial banks to marginal farmers also decelerated from 18.1 per cent in the 1980s to 13.0 per cent in 1990s.
- The shift in the composition of agricultural loans in favour of short term advances in a matter of concerns since it is likely to further accentuate the declining private sector capital formation in agriculture. For instance, while disbursements of short-term loans accelerated from 12.2 per cent in 1980s to 14.5 per cent in 1990s, disbursements of medium/long-term loans decelerated from 11.5 per cent to 9.7 per cent.

### **III. Burgeoning Foodstock**

1. The buffer stock of foodgrains reached a peak of 64.8 mt in May 2002, four times the minimum norms level. Foodgrains stock in recent times however declined to 32.8 mt in end-March to relief measures arising out of drought conditions in 2002 and persistent efforts by the Government to increase off-take primarily through exports. Piling of buffer stock have taken place primarily due to:
  - a. Domestic price distortion-
    - A skewed rise in the Minimum Support Prices (MSP) of rice and wheat compared to coarse cereals and pulses led to higher procurement in wheat and rice. The rise in support prices was mainly due to the change in methodology of including the "statutory minimum wages" instead of "actual wages" paid in computing the cost of cultivation.
    - Furthermore, in contrast to that of rice and wheat, the cost of production of coarse cereals and pulses has been generally higher than the MSP during the period 1983-84 to 1997-98.
    - The relative bills of wheat and rice have been greater than pulses and coarse cereals.
    - The above factors, i.e. low yield rates and high costs of production of pulses and coarse cereals and higher price support through MSP for rice and wheat distorted the cropping pattern in favour of rice and wheat.
  - b. International Price Distortion -
    - Higher domestic prices of rice and wheat in contrast to the declining trend in international prices due to restrictive trade

policies, while shielding farm incomes from international price volatility had however, adversely impacted on the price competitiveness of Indian exports of food grains. This led to growing dependence of farmers on higher procurement operations for market clearance.

c. Essential Commodities Act, 1955-

- The system of compulsory levy procurement and the restrictions on movement of food grains under ECA also contributed to increasing procurement operations.

d. Low Off-take-

- Off-take remained low due to rise in central issue price (CIP) and shifts in the consumption patterns away from cereals to non-traditional foods items. The rise in CIP was witnessed since the inception of targeted public distribution system 1997.
- The low off-take was also partly due to limited open market operations because of higher price for low quality food grains that were made available through PDS.
- Successive increases in MSP of rice and wheat and attendant increase in economic cost of food grains necessitate an increase in CIP for above-poverty-line consumers, resulting in narrowing the gap between open market prices of food grains and CIPs. This, in turn led to a drastic reduction in off take under targeted public distribution system. For instance, off-take under TDPS declined by 29.5 per cent from 1999-00 to 2000-01.
- There has been perceptible change in the consumption pattern towards milk, eggs and meat as against cereals. These partly caused the decline in off-take.

## 2. Implications of burgeoning food stock

a. Monetary implications

- As a result of unprecedented rise in food grain procurement operations, food credit increased from Rs 4,506 crore at end-March 1991 to Rs. 53,978 crore at end-March 2002. Consequently the share of food credit in total commercial bank credit increased from 3.9 per cent to 9.2 per cent during the same period.
- The higher demand for food credit could have possible crowding out effects on other sectors.

- Increased food credit by banks may have also affected the interest rate and credit risk profile of the banking system arising out of deteriorating quality of food grains stock, which act as collateral for food credit.
- The higher demand for resources through food credit could have affected the interest rate and liquidity conditions, particularly during conditions of strong economic activity.
- In the absence of any food credit refinance facility, banks may reduced their holdings of government securities, which could imply higher holding of securities by the Reserve Bank, thereby increasing the monetary base indirectly.

b. Fiscal impact

- Food subsidy rose moderately from Rs. 2,450 crore in 1991 to Rs. 5,377 crore in 1995-96 and then rapidly to Rs. 17,499 crore in 2001-02. On an average the food subsidy amounted to 4.1 per cent of Central Government expenditure.
- The composition of the food subsidy, over the years, has evolved in such a way that implicit producer subsidy (carrying cost by FCI for excess stocks over and above buffer norms) emerged as the largest component (rising from 12.8 per cent in 1993-94 to 48.9 per cent in 2001-02). The share in the subsidy of the other component, i.e. consumer subsidy (food subsidy net of carrying cost) accordingly suffered an erosion from 56.5 per cent of total food subsidy in 1993-94 to 21.9 per cent in 2001-02. This implies that a larger portion of the food subsidy is being spent on carrying costs, rather than on meeting the original aim of subsidising the consumers through the PDS.
- Food procurement operations of the FCI also imply contingent liabilities for the Central Government. As food credit is Government guaranteed, deterioration in the quality of food stock implies a further loss on the Government account.

#### **IV. Reinvigorating growth in agriculture would require:**

- a. Price system encouraging diversification towards high value added segments in response to the new demand structure in agricultural sector.

- b. Rationalisation of subsidies (fertiliser and food) and economically viable user charges (power and water) to augment resources for productive investment in rural infrastructure.
- c. Develop adequate storage facility to give boost to food processing industry, which have high growth potential.
- d. Standardisation of product quality for encouraging exports.

## V. Assessment and Prospects

### 2002-03

Indian agriculture experienced one of the worst droughts in 2002-03 after a normal spell of thirteen years.

- A long dry spell beginning in July 2002, which is a crucial month for sowing and plant growth resulted in rainfall during the south-west monsoon season at only 81 per cent of the long period average.
- Moreover, only 15 out of 36 metrological sub-divisions in the country received normal to excess rainfall. A situation last experienced in the drought of 1987.
- Despite quick initiation of various policy measures by the Task Force on drought real GDP emanating from agricultural sector contracted by 3.2 per cent in 2002-03.
- Drought relief measures included
  - allocation of additional quantities of food grains to various states as part of the food for work programme,
  - ensuring supplies of fodder for cattle,
  - waiver of interest on kharif loans,
  - rescheduling of crop loans into term loans,
  - grant of input subsidy to small and marginal farmers amounting to Rs 1,490 crores
- Localised droughts have a severe region-specific impact, often repetitively, as in the case of Western India which suffered three droughts during 1999-2000 to 2002-03 leading to a large losses of national oilseeds production. This underscores the urgent need for water harvesting and watershed development alongside water conservation.
- An area of vulnerability of Indian agriculture to weather shocks is the concentration in the cropping pattern, which constrains the flexibility of the supply response. Agricultural pricing policies are at a crossroad. There is considerable debate in the country today assessing their benefits in terms of ensuring food security versus the distortions in cropping patterns and input usage that have stemmed from a skewed incentive structure.

### 2003-04

- The Union Budget for 2003-04 expanded the Antyodaya Anna Yojana from April 2003 to cover an additional 50 lakh families, raising the total coverage to more than a quarter of all BPL families during the current year.

- In February 2003, 54 commodities, including rice, wheat, pulses and oilseeds, were made eligible for futures trading, taking the total number of such commodities to 148. Futures trading is expected to help farmers and traders to hedge their risks and thereby lessen their dependence on Government procurement.
- The National Agricultural Insurance Scheme will be transferred to the recently constituted Agricultural Insurance Company of India Ltd. (constituted in December 2002). The AIC will in due course cover other allied agricultural risks in addition to crop insurance.