

Growth in Agriculture

8.4 Deviations in foodgrains and agricultural output from its long-term trend are determined by, among other factors, variations of monsoon around its long-term trend. Furthermore, the negative impact of excess rainfall (compared to LPA) on such output appears to be not as high as the adverse impact of deficient rainfall. With this asymmetric response of foodgrains production to monsoon variability, the repetition of deficient rainfall in the monsoon in 2002, 2004 and 2006 during the Tenth Five Year Plan has led to—(a) poor agricultural growth; (b) reduction in the share of agriculture in GDP; (c) creating inflationary pressure in some primary products; and (d) reduction the potential growth of other sectors by dampening demand.

8.5 A moderate annual average growth of 3.0 per cent in the first six years of the new millennium starting 2001-02, notwithstanding a growth of 10 per cent in 2003-04 and 6 per cent in 2005-06, agriculture and allied sector has continued to be a cause of concern (Table 8.3). The structural weaknesses of the agriculture sector reflected in low level of public investment, exhaustion of the yield potential

of new high yielding varieties of wheat and rice, unbalanced fertilizer use, low seeds replacement rate, an inadequate incentive system and post harvest value addition were manifest in the lacklustre agricultural growth during the new millennium.

8.6 Low yield per unit area across almost all crops has become a regular feature of Indian agriculture (Table 8.4). For example, though India accounted for 21.8 per cent of global paddy production, the estimated yield per hectare in 2004-05 was less than that in Korea and Japan, and only about a third of that in Egypt, which had the highest yield level in the reference year. Similarly, in wheat, while India, accounting for 12 per cent of global production, had average yield slightly lower than the global average, it was less than a third of the highest level estimated for the UK in 2004-05. For coarse grains and major oilseeds, Indian yields are a third and 46 per cent, respectively, of the global average. In cotton, the situation is slightly better with Indian yields at 63 per cent of the global average. While agro-climatic conditions prevailing in countries may partly account for the differences in yield levels, nonetheless, for major food as well as commercial crops, there is tremendous scope for increasing yield levels with technological breakthroughs.

**Table 8.3 : Annual average growth rate
(at constant prices)**

(per cent)

Five Year Plan	Overall GDP growth rate	Agriculture & Allied Sectors
Seventh Plan (1985-90)	6.0	3.2
Annual Plan (1990-92)	3.4	1.3
Eighth Plan (1992-97)	6.7	4.7
Ninth Plan (1997-2002)	5.5	2.1
Tenth Plan (2002-07)	7.6	2.3
2002-03	3.8	-7.2
2003-04	8.5	10.0
2004-05 (P)	7.5	0.0
2005-06 (Q)	9.0	6.0
2006-07 (A)	9.2	2.7

P: Provisional, Q: Quick estimates, A: Advance estimates
 Note : Growth rates prior to 2001 based on 1993-94 prices and from 2000-01 onwards based on new series at 1999-2000 prices.
 Source : CSO

**Table 8. 4 : International comparisons of yield
Selected commodities –2004-05**

<i>Metric tonnes/hectare</i>					
Rice/paddy		Wheat		Maize	
Egypt	9.8	China	4.25	U.S.A	9.15
India	2.9	France	7.58	France	7.56
Japan	6.42	India	2.71	India	1.18
Myanmar	2.43	Iran	2.06	Germany	6.69
Korea	6.73	Pakistan	2.37	Philippines	2.1
Thailand	2.63	U.K	7.77	China	4.9
U.S.A	7.83	Australia	1.64		
World	3.96	World	2.87	World	3.38
Cotton		Major Oilseeds			
China	11.10	Argentina	2.51		
U.S.A	9.58	Brazil	2.48		
Uzbekistan	7.98	China	2.05		
India	4.64	India	0.86		
Brazil	10.96	Germany	4.07		
Pakistan	7.60	U.S.A	2.61		
		Nigeria	1.04		
World	7.33	World	1.86		

Source : Ministry of Agriculture and Cooperation.