

Chapter 3

Strategy for comprehensive agricultural growth

3.1 Introduction

To achieve the broad objective of the Department of enhancing agricultural growth, it was necessary to frame appropriate strategies ensuring proper forward and backward linkages like increase in acreage, irrigation potential, yield, crop diversification, seed development, storage and distribution, agricultural credit, pest and insect control, crop preservation, storage and market infrastructure and access.

We observed that strategy to deal with shortage of extension staff was not factored into SAP 2008 as well as AAPs and there was lack of synergy and convergence between Agriculture and other line departments in areas of water management, infrastructural development, agro-marketing etc. Different schemes / projects were executed in isolation from each other, as a result of which both the objectives of achieving annual growth rate of four *per cent* and enhancing the productivity of major crops to national level remained unachieved. The key deficiencies in the priority area as envisaged under SAP 2008 and unmet policy objectives are discussed in the succeeding paragraphs.

3.2 Decrease in area under cultivation

Increase in area under cultivation is crucial to enhancement in production and is therefore, an important strategy for achieving agricultural growth. As per the records of Director, the total cultivated area of 61.36 lakh hectares during 2006-07 declined by two *per cent* to 60.44 lakh hectares by 2010-11 in the State. Such decrease was mainly due to fast and widespread urbanization and indiscriminate use of agricultural land for industrial purposes. Revenue Department/District Collectors acquired 9662 hectares of private land for industries in 13 districts during 2000-11 without consulting the Agriculture Department.

The Principal Secretary confirmed (November 2011) the above observation during the exit conference.

Mention was made at paragraph 3.3.7.3 in the Comptroller and Auditor General's Audit Report (Civil) for the year ended 31 March 2007 that land marked/notified (1998) for *ayacut* under Balita Minor Irrigation Project (MIP) in Keonjhar district got reduced due to allotment of a part of such land to two private industrial houses³ by the Collector, Keonjhar without consulting either the Water Resources Department or the Agriculture Department.

SAP 2008 explicitly focussed on integrated development of about three lakh hectares of waterlogged area through appropriate engineering and land management interventions. However, CCO has not chalked out any plans for the development of the same and the cultivable area in the State remained constant at 61.80 lakh hectares through out 2006-11.

³ (1) M/s Jindal Steel Limited, (2) M/s Crackers India Limited

In the 31⁴ test checked agricultural districts, we noticed that the cultivated area⁵ had reduced by two *per cent* from 40.96 lakh hectares in 2006-07 to 40.21 lakh hectares in 2010-11. Similarly, while net area sown under *Kharif* had decreased from 39.19 lakh hectares to 38.04 lakh hectares the same increased marginally from 15.69 lakh hectares to 16.08 lakh hectares in *Rabi* during the same period. Maximum decline were in Anugul, Dhenkanal, Jajpur, and Ganjam districts where 1466.08 hectares, 1053.11 hectares, 1594.7 hectares and 1192.69 hectares of private land respectively were transferred to industrial houses for setting up industries through land acquisition processes by the respective Collectors, without seeking the prior approval / concurrence of the Agriculture Department.

The district-wise acquisitions made are given in the **Table 1** below:

Table 1: District wise acquisition and allotment of private land in favour of industries

Sl no.	Name of the Districts	Number of promoters of Industries	Land allotted (in hectares)
1.	Anugul	2	1466.08
2.	Cuttack	1	44.47
3.	Dhenkanal	4	1053.11
4.	Ganjam	1	1192.69
5.	Jagatsinghpur	1	1150.64
6.	Jajpur	6	1594.70
7.	Jharsuguda	8	967.80
8.	Keonjhar	4	133.51
9.	Sambalpur	5	888.38
10.	Sundargarh	2	40.61
11.	Kalahandi	1	640.78
12.	Koraput	1	128.04
13.	Rayagada	1	361.64
	Total	37	9662.45

Thus, due to lack of coordination among the Revenue, Agriculture and Water Resources Departments there was indiscriminate acquisition of private land for industrial purposes by the Revenue Department.

3.3 Inadequate irrigation facilities

Irrigation plays a significant role in increasing agricultural yield from the land. The SAP 2008 provided for assured irrigation to at least 35 *per cent* of the cultivable land in each block, to be achieved through both flow and lift irrigation. We noticed that the irrigation potential of the State from all sources increased from 27.21 lakh hectares in 2006-07 to 30.36 lakh hectares in 2010-11. However, out of total irrigation potential area of 30.36 lakh hectares in 2010-11, only 20.85 lakh hectares (69 *per cent*) was under crop cultivation. The reasons were not available with the Department.

⁴ Out of 32 test checked districts, one district (Phulbani) could not furnish complete information.

⁵ Cultivated area: Net area sown *plus* current fallow area not cultivated, Cropped Area: Total area covered with crops (if two or more crops are sown on same land in a year, cropped area will be aggregate for all those crops), Net area sown: single cropped area during *Kharif* and *Rabi* season during the same year

In the 32 test checked agricultural districts, we noticed that irrigation potential increased on an average from 36 *per cent* in 2006-07 to 40 *per cent* in 2010-11. However, there was an inter-district variation in creation of irrigation potential as indicated in **Table 2** below.

Table 2: creation of irrigation potential in the 32 test checked agricultural districts during 2006-11

Potential of irrigation created in districts (Average) (in percentage)	Number of agricultural districts
<15	3 ⁶
>15<34	16 ⁷
>34	13 ⁸
Total	32

(Source: Information furnished by 32 test checked District Agriculture Offices)

The Principal Secretary during exit conference stated (November 2011) that for irrigation, Agriculture Department solely depended upon Water Resources Department and co-ordination between both the departments at district level was ensured by the District Collector through a consultative process for water availability and use. The fact, however, remained that while creation of irrigation potential was the responsibility of the Water Resources Department, the Agriculture Department has set itself the agenda of providing assured irrigation to at least 35 *per cent* of cultivable land in each block and encouraging participatory community irrigation management through water users associations as specified in the SAP 2008. Thus, without an effective inter departmental coordination mechanism at the apex level, the above agenda may remain confined only to the policy document.

3.4 Agricultural productivity

As envisaged in SAP 2008, the Department aimed at achieving annual agricultural growth rate of four *per cent* by the end of Eleventh Plan (2007-12) and enhancing the productivity of important crops to match with national average. Audit analysis, however, revealed that the productivity of important crops like paddy, pulses and oil seeds remained far below the national average during 2006-11 as indicated at **Table 3** below:

⁶ Champua, Jashipur, Karanjia,

⁷ Bangiriposi, Bhawanipatna, Bolangir, Dhenkanal, Gunupur, Jharsuguda, Keonjhar, Khariar, Koraput, Kuchinda, Parlakhemundi, Phulbani, Rairangpur, Soro, Sundargarh, Titilagarh

⁸ Athagarh, Anugul, Balasore, Bargarh, Berhampur, Bhadrak, Dharamgarh, Jagatsinghpur, Jeypore, Kendrapada, Nayagarh, Puri, Udala,

Table 3: State and National averages of productivity

Agricultural productivity	Unit	2006-07		2007-08		2008-09		2009-10		2010-11	
		State	National average	State	National average	State	National Average	State	National Average	State	National Average
Rice	Qtl/ha	15.57	21.31	17.20 (10)	22.02	15.53 (-10)	21.78	16.09 (4)	21.30	16.21 (1)	22.40
Pulses	Qtl/ha	4.44	6.12	4.58 (3)	6.25	4.97 (9)	6.59	4.60 (-7)	6.25	4.86 (6)	6.89
Oil seeds	Qtl/ha	7.19	9.16	8.04 (12)	11.15	8.48 (4)	10.06	7.76 (-8)	9.55	6.26 (-20)	11.59

Figures in parenthesis indicate growth rate in percentage over previous year

(Source: Odisha Agriculture Statistics 2010-11 and Directorate of Economics and Statistics, Department of Agriculture and Cooperation Go I for 2010-11)

It could be seen from the table above that the productivity of rice had decreased during 2010-11 compared to the same in 2007-08. In the case of pulses, productivity picked up during 2007-09 and declined in the next year to pick up again during 2010-11. In case of oilseeds, the productivity was on decline during 2009-11. There was mixed growth rate in all the three crops during the period 2006-11. Thus, the objective of annual growth rate of four *per cent* as envisaged in SAP 2008 was not achieved for the major crops. Moreover, the productivity of all the above three products was much below the national average as targeted in the SAP 2008. This indicated that the strategy adopted by the Department to achieve higher productivity was inadequate and planning was deficient as the same was not bottom up and done in a routine manner.

The Principal Secretary attributed (November 2011) the low productivity and low growth rate to acidic soil as well as non-use of micronutrients while using chemical fertiliser and stated that intensive soil testing, use of micronutrients and organic fertilisers and effective demonstration to motivate farmers to adopt modern method of farming could only address these issues.

The fact remained that these factors were well known to the Department even before the SAP 2008 which the Department sought to change drastically through the SAP 2008 policy intervention/input. We are of the view that low productivity and low growth were largely due to absence of long term planning and vision to address the above challenges coupled with inadequate consultations with all stakeholders including farmers and research institutions who could have thrown up more effective strategies to address these long standing challenges. The Principal Secretary, however, assured (November 2011) to take care of these aspects while framing the Twelfth Plan strategy.