

Report of the Comptroller and Auditor General of India

on Agriculture Department (Agriculture Wing)

for the year ended 31 March 2011

(No. 5)

Government of Odisha



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Preface

This Report has been prepared for submission to the Governor under Article 151 of the Constitution.

This report of the Comptroller and Auditor General of India contains results of the Chief Controlling Officer based audit of the activities of the Agriculture Department (Agriculture Wing) of the Government of Odisha covering the five year period 2006-11.

The cases mentioned in this Report are among those which came to notice in the course of test audit (April – July 2011) of accounts for the period 2006-11 as well as those which had come to notice in earlier years but could not be dealt with in previous Reports; matters relating to the period subsequent to 2010-11 have also been included wherever necessary.

Audit has been conducted in conformity with the Auditing Standards issued by the Comptroller and Auditor General of India.

Executive Summary

The over-arching objective of Agriculture Department was to ensure comprehensive agricultural growth in the State in terms of both production and productivity as also farmers' welfare. We conducted audit of Agriculture Wing of Agriculture Department covering the period 2006-11 during April to July 2011 with the broad objective of assessing the efficiency and effectiveness of the Chief Controlling Officer (CCO) in operationalising the State Agriculture Policy 2008 (SAP) for achieving the afore-stated broad objective of the Department. We also looked at the robustness and efficacy of the strategies adopted to achieve these policy objectives.

We are of the opinion that the CCO did not attach adequate importance to planning as an instrument of development and growth of agriculture in the State. Audit noticed that despite announcement of State Agriculture Policy (SAP) in 2008, the Department was moving without direction and focus in the absence of any long term planning. While perspective plan was not prepared despite its requirement under the State Policy and instructions of the Chief Minister, the Annual Agriculture Plans were prepared centrally at the Directorate level without consulting District Agriculture Plans prepared by the Planning and Co-ordination Department which were then routinely approved by the CCO. Bottom-up approach in planning taking into account local needs, knowledge and problems to bridge the existing gap in availability of resources and capacity building etc., was largely missing.

(Paragraphs 2.2 and 2.4)

Though the State had irrigation potential for 30.36 lakh hectares, the fact that only 20.85 lakh hectares (69 per cent) were under crop cultivation was an area of concern. Jalaniidhi scheme for captive irrigation virtually failed in Jagatsinghpur district due to irregular execution of shallow tube wells in saline affected Gram Panchayats (GPs).

(Paragraph 3.3)

Though the seed replacement rate (SRR) of the major crop i.e., rice, gradually increased, the productivity decreased and was far below the national average. Similarly, agricultural productivity of other major crops like pulses and oil seeds remained much below the national average.

(Paragraphs 3.4 and 4.1.1)

There was less supply of quality seeds to the growers than what was required by them. Instances of sale and distribution of sub-standard seeds resulting in crop loss and consequent compensation payment, sale of subsidised seeds to persons without permits, low fertiliser consumption and inefficient organic farming came to our notice during audit.

(Paragraphs 4.2.1, 4.2.2, 4.2.3, 4.3.2, 4.3.3 and 4.3.4)

Opening seed sales centres in all 6234 Gram Panchayats (GPs) was one of important strategies in SAP 2008; these centres were opened only in 1625 GPs affecting the objective of doorstep supply of seeds to the farmers.

(Paragraph 4.1.7)

Non-functioning of soil testing laboratories, slow pace of construction of seed storage godowns and agricultural market yards, neglect in establishment of agro service centres particularly in the backward districts, delay in commissioning of seed processing facilities, seed certification and testing facilities etc. also came to light during audit.

(Paragraphs 4.1.4, 4.1.5, 4.1.6, 4.3.1, 5.3.2 and 6.2.6)

As against the requirement of buildings for Farm Information Advisory Centres in each of the 314 Blocks, construction of 200 such buildings alone were planned and a mere 61 buildings completed as of April 2012.

(Paragraph 6.3.3)

Large scale vacancies of Village Agriculture Workers (44 per cent) and Assistant Agriculture Officers(46 per cent) who are at the cutting edge of all extension activities in the Department affected agriculture extension service in the field like timely training of farmers, demonstration of modern technology and dissemination of package of improved agricultural operations.

(Paragraph 7.1)

There was inadequate monitoring at the CCO level over the subsidy management and seed procurement by Agricultural Promotion and Investment Corporation of Odisha Limited (APICOL), Institute on Management of Agricultural Extension (IMAGE) and Odisha State Seed Corporation (OSSC) exclusively set up for such purposes.

(Paragraphs 4.1.3 and 5.3.1)

Research activities and infrastructural development works undertaken by the Odisha University of Agriculture and Technology were not monitored despite release of ₹ 14.59 crore under Rashtriya Krishi Vikash Yojana (RKVY) during 2007-11. Besides, the soil fertility map required for formulation of nutrient management strategy could not be prepared although funds were not a constraint.

(Paragraphs 6.2.3 and 8.5)

The required annual concurrent evaluation of implementation of NFSM scheme in the State was not undertaken since the implementation of the scheme in 2007-08. Despite instruction of State Level Sanctioning Committee (May 2010), the third party evaluations on the execution of RKVY projects were yet to be received.

(Paragraph 6.4)

Budgetary as well as financial controls were found to be unsatisfactory as many instances of non-compliance with the provisions of Odisha Budget Manual, financial, treasury and service codes by test checked Drawing and Disbursing Officers (DDOs) were noticed.

(Paragraph 8.2)

Internal Audit remained handicapped with 44 per cent vacancies at the level of auditors and without Internal Audit Manual being prescribed at all.

(Paragraph 8.6)

Monitoring of the performances of DDOs as well as inspection of field offices by the Controlling Officer (CO) and CCO was inadequate and ineffective.

(Paragraph 8.8)

Chapter 1

Introduction

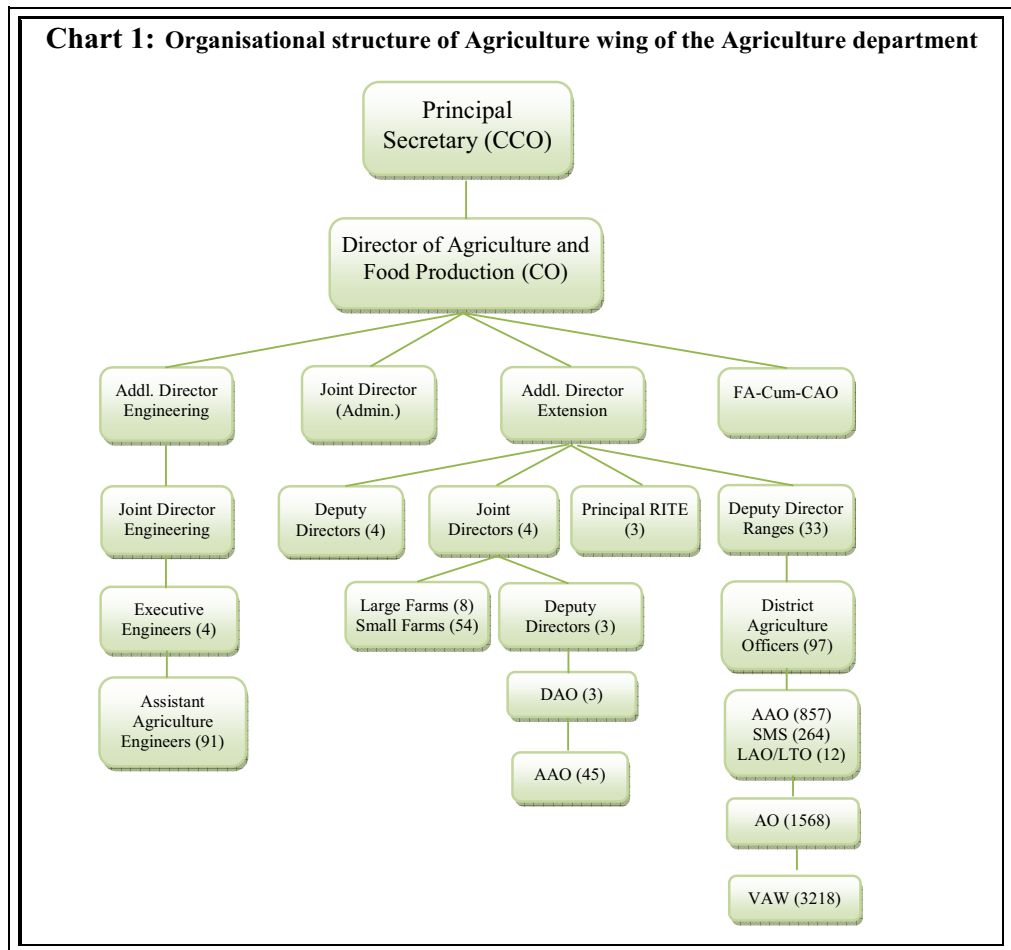
1.1 Introduction

Odisha is an agrarian State. Out of the total geographical area of 155.71 lakh hectares in the State, only 64.09 lakh hectares (41 *per cent*) was cultivable land of which 40.17 lakh hectares (63 *per cent*) have acidic soil, about four lakh hectares suffer from salinity and three lakh hectares from water logging indicating the need for special interventions like soil testing and administration of adequate dose of appropriate fertiliser and micro-nutrients, engineering and land/crop management (Odisha State Agriculture Policy 2008). Almost 83 *per cent* of the population of the State live in rural areas as per Census 2011 (Provisional) while 70 *per cent* of the population depend on agriculture for their living and livelihood. Rice has been the main crop of the State constituting 75 *per cent* of the cultivable area followed by oil seeds and pulses. Agriculture is still regarded as the mainstay of the State's economy providing food and livelihood security to the rural poor.

The broad objective of the State Agriculture Department was to increase agricultural production and productivity as well as farmers' welfare. Keeping in line with the National Agriculture Policy (NAP) 2000, the State Agriculture Department framed (July 2008) State Agriculture Policy (SAP) 2008. The Policy aimed at achieving a growth rate of four *per cent* in the agriculture sector on a sustainable basis and enhancing productivity of important crops to match with the national average. Some of the major Centrally sponsored schemes under implementation in the State were National Food Security Mission (NFSM), *Rashtriya Krishi Vikas Yojana* (RKVY), Work Plan Schemes and Support to Extension Reforms. Some of the State plan schemes under implementation were *Jalanidhi*, input subsidy, popularisation of agricultural machinery and implements, agricultural marketing etc.

1.2 Organisational structure

The Principal Secretary is the Chief Controlling Officer (CCO) of the Agriculture Department. The Director of Agriculture is the functional implementation head and Controlling Officer (CO) of the Agriculture wing of the Department. The Director is assisted by two Additional Directors (one each for the Engineering and Extension wings), six Joint Directors of Agriculture (JDA), seven Deputy Directors of Agriculture (DDA) and one Financial Advisor-cum-Chief Accounting Officer at the Headquarters. The Development Commissioner-cum-Additional Chief Secretary of the Planning and Coordination Department assisted by a Special Secretary also prepares the annual State Agriculture Plans for the Department.



The JDAs remained in charge of various functional activities like Engineering wing, Farms and Seeds, Information etc. The Additional Director (Extension) who is incharge of field functions (extension services) is assisted by Deputy Directors of Agriculture (33), District Agriculture Officers (97), Assistant Agriculture Officers (857), Subject Matter Specialists (264), Agriculture Overseers (1568) and Village Agriculture Workers (3218). Similarly, the Additional Director (Engineering) is assisted by Executive Engineers (4), Assistant Agriculture Engineers (91) and other subordinate staff. Besides, three Regional Training Institutes were also functioning under the Department at Bolangir, Mahisapat and Rangeilunda. Experimental Seed Farms (eight large under Farm Superintendents and 54 small under DDAs) were also functioning under the Department. There were 366 Drawing and Disbursing Officers (DDOs) under the Agriculture Department of which 183 were functioning under Agriculture Wing. There were 97 agricultural districts within 30 revenue districts.

1.3 Reasons for selection of the Department

Agriculture Department is one of the most important departments of the Government as it was directly responsible for increasing farmers' income by reducing cost of inputs of farming and ensuring remunerative price for their agricultural produce. The SAP 2008 aimed at shifting from subsistence agriculture to a more profitable commercial variety through various interventions. It was important to assess whether this shift in strategy was backed up by provision of adequate inputs and effective extension service for capacity building of farmers to be able to shift to the new regime and reap benefits out of such shift.

Net area sown in the State decreased from 58.45 lakh hectares in 2001-02 to 55.74 lakh hectares in 2009-10 despite ₹ 1974.49 crore being spent during this period on agriculture through the budget route and ₹ 99.92 crore during 2006-10 through off budget route. Besides, production of food grains went down from 75.4 lakh MT in 2001-02 to 73.93 lakh MT in 2008-09 and then increased to 75.51 lakh MT in 2009-10. The cultivated area under paddy declined to 68 *per cent* of total cultivable area (61.80 lakh hectares¹) of the State in 2010-11 compared to 72 *per cent* during 2006-07. Even, yield rate of paddy consistently remained below the national average during 1997-2011 as indicated in *Appendix-1*. Despite being an agrarian State, the share of agriculture and animal husbandry sector in the Gross State Domestic Product at current prices was around 18 *per cent* during 2008-10. This prompted us to conduct Chief Controlling Officer (CCO) based Audit of Agriculture Wing of Agriculture Department.

1.4 Audit objectives

The objectives of this audit were to assess whether:

- Perspective plan and Annual Action Plans (AAP) for the agricultural sector for operationalising the new State Agricultural Policy 2008 were prepared and if so, whether the plans were adequate and effective;
- the strategies for comprehensive agricultural growth with all forward and backward linkages were adequate and effective to achieve the objectives of the new policy;
- internal control system including compliance to laws, rules and regulations were in place and effective;
- inspection and monitoring was adequate and efficient, contributed to economic, efficient and effective management of the operation in the department and that error signals were promptly and adequately acted upon.

¹ As per SAP 2008, the cultivable area of State was 64.09 lakh hectares. However, Agriculture Department has furnished 61.80 lakh hectares as total cultivable area for the period covered under audit (2006-11).

1.5 *Audit criteria*

The criteria were drawn from following list of documents.

- Overall mandate given to Agriculture Wing/Directorate of Agriculture by State Government;
- State Agriculture Policy (SAP) 2008;
- Eleventh Five Year Plan, Annual Plans and Action Plans;
- Provisions of Odisha General Financial Rules, Odisha Treasury Code, Odisha Budget Manual and Odisha Public Works Account Code etc;
- Instructions, circulars and guidelines of specific schemes of Central and State Governments;
- Prescribed monitoring mechanism

1.6 *Scope and methodology of Audit*

Audit of the activities of the Agriculture Wing of the Department covering the period 2006-11 was undertaken during April 2011 to July 2011 through test check of records of 55 (30 *per cent*) out of the total of 183 Drawing and Disbursing Officers (DDOs) of Agriculture wing of the Agriculture Department (*Appendix-2*). These 55 DDOs were selected on the basis of Stratified Random Sampling without Replacement (SRSWOR) considering the expenditure incurred by the DDOs during 2009-10 as the criteria. The 55 DDOs included 32 District Agriculture Officers (DAOs) in charge of agricultural growth in the concerned district, seven Deputy Directors of Agriculture (DDA) in charge of sale of seeds including experimental seed farms under them and administration over field officers of the concerned districts, four Soil Chemists responsible for soil testing, one training institute and 11 other State level /sub-district level officers. Besides, we visited the offices of (i) Odisha State Seed Corporation (OSSC), (ii) Agriculture Promotion and Investment Corporation of Odisha Limited (APICOL), and (iii) Institute on Management of Agricultural Extension (IMAGE) for collection of information as these agencies provided support services to the Department.

The audit objectives, audit criteria as well as scope and methodology of audit were discussed with the CCO-cum-Principal Secretary of the Department in an entry conference held on 12 May 2011. The audit findings were also discussed in an exit conference with the CCO on 24 November 2011; the response of the CCO has been appropriately incorporated in the report.

The draft report on audit was issued to the CCO-cum-Principal Secretary in November 2011 and June 2012; reply was awaited (July 2012).

1.7 Organisation of audit findings

The findings of audit as a result of such test check of records are discussed in the chapters as detailed below:

Chapter 2	Planning
Chapter 3	Strategy for comprehensive agricultural growth
Chapter 4	Input management
Chapter 5	Management of agricultural subsidy
Chapter 6	Implementation of schemes
Chapter 7	Human resource management
Chapter 8	Internal control system

Chapter 2 Planning

2.1 Introduction

Long-term planning and annual action plans flowing therefrom are essential ingredients of good governance. State Agriculture Policy 2008 emphasized enhancing productivity of important crops to match the national average. It also aimed to achieve annual growth rate of four *per cent* set in NAP 2000 by adopting various strategies like enhancing Seed Replacement Rate (SRR), making available quality planting materials/seeds, Integrated Nutrition Management (INM), Integrated Pest Management (IPM), water management, farm mechanisation, technology transfer, etc. for the next 10 years.

2.2 Absence of long term perspective planning

As desired (June 2009) by the Chief Minister in the meeting of all the Secretaries, the Chief Secretary instructed all the Departmental Secretaries to prepare a five year perspective plan indicating the key action areas along with clearly identified monitorable targets as per priorities set by the Government and the targets for the first year was to be spelt out with quarterly milestones. The SAP 2008 also required the Department to anticipate and address emerging trends, identify potential areas for development and chalk out clear agenda for agriculture development for at least next 10 years.

We noticed that long-term perspective plan was not formulated despite lapse of three years since the State Agriculture Policy was framed in 2008 and instructions of Chief Secretary. Annual plans of Agriculture Departments on crop production, input management, quality control, soil testing, plant protection, agriculture mechanisation, implementation of Centrally Sponsored and State Plan schemes were being prepared in a routine and adhoc manner without these flowing from a scientifically prepared perspective plan.

The Principal Secretary stated (November 2011) that perspective plan had not been prepared as needs of the Department were being considered by one sub-committee of the Planning and Co-ordination (P&C) Department entrusted with the preparation of Eleventh and Twelfth Five Year Plans. He further stated that it was of little use to make a separate plan as required funds for many proposed activities were often not available due to arbitrary and sudden plan ceilings imposed by the P&C Department and also due to acute shortage of staff in the Department.

The reply was not tenable as long term planning was essential for every department to achieve the mandate of the department. Issues like shortage of staff, non-availability of funds etc. could have been addressed in a scientific and focussed manner rather than in a piece-meal manner. Besides, long-term plans were not made just to access funds but more often to channelise whatever funds were available amongst certain prioritised areas/sectors/schemes/projects in the most optimal way. Thus, shift from subsistence agriculture to commercial agriculture and popularising the same as a vocation as envisaged under the SAP

2008, was yet to receive systematic and focussed attention of the Department in the absence of a perspective plan.

2.3 Annual Action Plans made without proper linkages

The Annual Action Plans (AAPs) prepared were not effective in bringing synergy and convergence between different GoI sponsored schemes like *Rashtriya Krishi Vikas Yojana* (RKVY), National Food Security Mission, Extension Reforms and State schemes like agricultural marketing, input subsidy, *Jalanidhi*, etc., implemented by Agriculture Department and other line departments like Revenue, Water Resources and Cooperation Departments, State Public Sector Undertakings and Institutions as discussed in subsequent paragraphs/chapters.

2.4 Bottom up approach in annual planning missing

The Planning Commission of India in the ‘Manual for Integrated District Planning’, emphasised bottom up planning to ensure that plans relevant to the local area were prepared with participation of local communities for gaining a strong sense of ownership. Under the directive, the Planning and Coordination Department of the State was responsible for preparation of annual comprehensive district plans for sending to the Planning Commission. The SAP 2008 also required that operational plans to address the problems of farmers were to be prepared at the district level with involvement of stakeholders including Panchayati Raj institutions through participatory and bottom up planning. Such District Agricultural Plans were to be integrated into a State Agricultural Plan. Agriculture Department was to coordinate with other allied Departments to evolve appropriate mechanism. From 2008-09, the RKVY² scheme stipulated preparation of District Agriculture Plans projecting the requirement of the local needs for development of agriculture and allied sectors of the district and integrate them into a comprehensive State Agriculture Plan to become eligible to receive grants from the Government of India (GoI).

We observed that the Planning and Coordination (P&C) Department engaged Technical Support Institutions (TSIs) to prepare Annual Comprehensive District Agricultural Plans (C-DAP) for the year 2008-09 along with comprehensive district plans as required under the RKVY scheme and directives of Planning Commission respectively. The TSIs after preparation of the C-DAPs submitted the same to the District Planning Committee who in turn passed on the same direct to the P&C Department. An expenditure of ₹1.35 crore was borne by the Agriculture Department on this account. During 2009-11, the P&C Department prepared only comprehensive district plans containing district agriculture plans and no separate C-DAPs were prepared. However, neither the C-DAPs nor the comprehensive district plans containing the district agriculture plans were considered by the CCO while preparing the Annual Plans of the Agriculture Department for the above period as required under SAP 2008. Rather, the Annual Plans were prepared at the Directorate level in a top driven fashion based on sanction of schemes by the GoI and the State

² Objective of RKVY a Centrally Sponsored State Plan scheme with 100 *per cent* central assistance was to ensure a holistic development of agriculture and allied sectors by adopting state specific strategy.

Government after collecting some information from the DAOs / Deputy Directors in different meetings, and were sent to P&C Department for incorporation in the State Annual plans. Even the P&C Department did not integrate the C-DAPs and the district plans in the State plan document for 2008-10 due to delay in receipt of the same at their level.

Thus, the C-DAPs prepared were not gainfully used for any meaningful planning but used mainly to obtain funds from GoI under the 'Rashtriya Krishi Vikas Yojana' (RKVY) scheme. Besides, local knowledge and wisdom, traditional knowledge, local problems and their possible local mitigation strategies were completely missing in the AAPs as these were prepared at the directorate level without consulting the district plans.

2.5 Overlapping of activities under different schemes

A State Level Sanctioning Committee (SLSC) was constituted in 2007 under RKVY which was responsible for sanctioning the projects of the scheme and to ensure that no duplication of efforts or resources took place. Government of India (GoI) further advised (February 2009) the State Government to ensure that there was no duplication/overlapping of activities/areas covered under RKVY projects vis-à-vis existing schemes of Central or State Governments

During scrutiny of records of the schemes in the Directorate and Agricultural Promotion and Investment Corporation of Odisha Ltd (APICOL), it was observed that contrary to the above instructions, various agricultural equipment and machinery like power tillers, power operated / driven agricultural implements etc., were distributed during 2008-11 both under Macro Management of Agriculture (MMA) and RKVY by incurring expenditure of ₹ 141.20 crore (RKVY: ₹ 119.52 crore and MMA: ₹ 21.68 crore) towards subsidy on the same type of implements under both the schemes in the State. The Director being the monitoring authority for MMA and also a member of SLSC had failed to stop the overlapping activity under both the schemes during the period.

2.6 Shortfall in budgetary outlay on agricultural marketing and crop insurance

We reviewed the Eleventh Five Year Plan proposal and noticed that the thrust areas of budgetary support as projected by the State Government were implementing the State Agricultural Policy, providing input subsidy, skill development to farmers, soil testing, improving irrigation potential, strengthening agricultural marketing, promoting organic farming, farm mechanization, macro management of agriculture, pulse and oilseed development, extension reforms, enhancing production and productivity of rice and pulses, increasing seed replacement rate etc. Component-wise budgetary outlay for Eleventh Plan period (2007-12) and annual plans 2007-08 to 2010-11 under major schemes are indicated at *Appendix-3*.

We noticed that there were major shortfalls in budgetary allocation compared to projections made in the State Plan schemes under the activities (i) agriculture marketing (81 per cent), (ii) crop insurance (85 per cent) and (iii) Agriculture Research and Education grant to OUAT (82 per cent) during 2007-11,

indicating markedly less emphasis on these sectors, which were, however, known to be crucial both for agricultural development and farmers' welfare. The reason for such low emphasis on these crucial areas was not furnished by the CCO-cum-Principal Secretary though called for. The budgetary support, however, gave highest priority to areas like (i) subsidy provided towards use of seeds, (ii) fertilisers, (iii) RKVY, and (iv) oilseeds and pulses development programmes; yet production failed to pick up substantially in most major crops.

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.

Chapter 4

Input management

The SAP 2008 laid emphasis on management of various inputs like seed, fertiliser which were vital for development of agriculture in the State

4.1 Seed development, storage and distribution facilities

Seed is one of the most important inputs that play a key role in enhancing agricultural productivity. SAP 2008 envisaged enhancing seed replacement rate, making available quality seeds, promoting hybrid seeds, seed treatment, processing and storage to boost agricultural production. Scrutiny of records revealed following deficiencies.

4.1.1 Low Seed Replacement Rate

Seed replacement rate (SRR) is the percentage of area of crop in which certified/ improved quality seeds was used in a given crop season. As low seed replacement rate was one of the identified factors for low productivity and production in the State, the SAP 2008 as well as Annual Action Plans gave much emphasis on enhancing the SRR. The SRR of paddy which was 6.4 *per cent* in 2006-07 was targeted to be enhanced to 25 *per cent* by the end of Eleventh Plan. As per record of Department (Odisha Agriculture Statistics 2010-11), SRR of paddy increased to 20.64 *per cent* by 2010-11 which indicated a positive trend, though it still remained below the targeted 25 *per cent*. We further noticed that SRR of non-paddy crops like *Arhar*, *Urd*, *Moong*, *Niger* and *Ragi* in the State remained below five *per cent* during 2009-10 in the absence of any target set for SRR under SAP 2008 or by the CCO.

Some of the reasons for non-achievement of the targeted SRR were found to be non-supply of adequate quantity of seeds in time, sale of substandard seeds to farmers and shortage of extension staff as discussed by us in subsequent paragraphs/chapters.

The Principal Secretary during discussion in the exit conference stated (November 2011) that SRR of non-paddy crop was less and was around five *per cent* due to short supply of seeds during 2006-11 which was also admitted by the Managing Director, Odisha State Seed Corporation (OSSC). The Principal Secretary added that the OSSC failed to procure seeds from either within or outside the State. However, specific strategy to address this issue of enhancing SRR taking care of the bottlenecks mentioned above was not spelt out clearly. All this was indicative of faulty planning as this problem should have been identified much earlier when strategies were being firmed up for operationalising the SAP 2008.

4.1.2 Seed multiplication in water logged, flood prone and saline areas

The State Level Sanctioning Committee (21 May 2010) under RKVY decided (21 May 2010) to formulate a project for multiplication of seeds which can be grown in flood prone area, water logged and saline areas of the State covering ten lakh hectares in *Kharif* 2011. However, we noticed that no follow up action was taken even after a lapse of more than a year.

The Director confirmed (January 2012) the fact and could not assign any reason for the same. Thus, the objective of SAP 2008 for special interventions in water logged and saline areas was not given priority.

4.1.3 Implementation of Seed Village Scheme

The seed village scheme of GoI launched in 2005-06 envisaged a model of participative production of certified seeds through interested group of farmers each possessing 0.20 hectares of land for cultivation of specified seed crop. The identified farmers were to be supplied certified⁹/foundation seeds¹⁰ at 50 *per cent* of the cost and imparted training on seed production and seed technology. Subsidy was also given for procurement of storage bins. The project area should receive the above assistance for a maximum period of two years so that the identified farmers get conversant. SAP 2008 also emphasised on intensifying the Seed Village Scheme for participative production of certified seeds. The scheme was executed by the Director of Agriculture through Odisha State Seeds Corporation (OSSC). The quality seeds produced in the scheme were to be procured by the OSSC and supplied to farmers.

Scrutiny of records of the Director and the OSSC revealed that during 2006-11, ₹ 13.45 crore received from Government of India for implementation of the scheme was fully utilised during the period. Against the target of covering 62760 acres under the scheme involving 3.14 lakh farmers, 67316 acres (107 *per cent*) were covered involving 3.37 lakh farmers; the achievement being higher than the target. During 2007-11, 99655.94 quintals of certified seeds and 817 quintals of foundation seeds were produced. The scheme was left to be monitored by the OSSC. The Director did not fix any norm or target for production of certified seeds in these areas. Thus, Director/CCO did not have an effective monitoring mechanism for deriving optimum benefit out of the implementation of the scheme.

In two (Dhenkanal and Sundargarh) out of seven DDAs, test checked in audit, we noticed that during 2007-11 the OSSC did not facilitate certification and procurement of the 12756 quintal of paddy, 1285 quintal of groundnut seeds and 1435 quintal of *Biri* seeds despite deposit of registration fee of ₹ 1.63 lakh by the farmers on the plea of staff shortage. As a result, the farmers were deprived of the facility of certification as well as purchase of certified seeds produced by them by the OSSC as envisaged under the programme which would have significantly contributed to building ownership and partnership for this scheme by the farmers.

The CCO-cum-Principal Secretary admitted (November 2011) that while OSSC failed to procure seeds timely from outside the State, it also failed to procure these within the State even though the same was available with farmers and assured to look into the matter. This indicated lack of focussed attention of the CCO on implementation of the scheme by the OSSC.

⁹ Certified seeds are those seeds whose qualities like purity, germination capacity etc. are certified by the certifying agencies in the state and the centre.

¹⁰ Foundation seeds are those which are made out of breeder seeds produced by the research institutions at the state and centre.

4.1.4 Seed certification and testing facility not operationalised in all districts

SAP 2008 and Annual Action Plans provided for the setting up more Seed Testing Laboratories in the State in addition to eight Seed Certification Offices functioning in the State. In the SAP 2008, it was planned to set up five more Seed Certification Offices with seed testing laboratories to cater to the needs of all districts of the State.

We noticed that during 2009-10, as sanctioned by the SLSC, the CCO-cum-Principal Secretary released RKVY funds of ₹ 4.15 crore in favour of Odisha State Seed and Organic Products Certification Agency for construction of buildings for three seed testing laboratories (Balasore, Badachana and Bhawanipatna) and four seed certification offices (Baripada, Bolangir, Rangeilunda and Jeypore). While only one seed certification office at Baripada started functioning in December 2010; another building at Balasore was completed in August 2011 but was not operational due to non-installation of electrical connection. Buildings in the remaining cases were at various stages of construction (October 2011). The intended objective of seed testing in these districts remained unachieved.

4.1.5 Availability of seed processing facility

The SAP 2008 envisaged establishing seed processing plants along with godowns of adequate capacity in each district and adequate numbers of mobile seed processing plants were to be procured to provide processing facility to seed villages. There were altogether 106 registered seed processing plants under the Government and private sector in the State before launching of SAP 2008 and 52 such plants were registered thereafter. However, no such plants were registered in two districts of Boudh and Phulbani as of 2010-11.

During 2007-08, the SLSC sanctioned RKVY funds of ₹ 1.80 crore for establishment of three seed processing plants (Bolangir, Boudh and Nawarangpur). Although the construction of plants were completed (July 2011), these were not commissioned (January 2012) due to non-installation of electricity connection. However, Phulbani district continued to remain ignored (March 2011).

In the exit conference, we pointed out that when the farmers were being encouraged to produce seeds, OSSC should have evolved some system for timely processing and purchase of seeds from farmers. The Managing Director (MD), OSSC stated (November 2011) that seed processing facility in the State was grossly inadequate. The CCO-cum-Principal Secretary stated that when seed village scheme was promoted and there was surplus seed production under the scheme, these seeds could have been purchased from farmers and sold to other States. He agreed that some fine-tuning was necessary in this regard. This indicated that the CCO did not effectively monitor activities of OSSC.

4.1.6 Inadequate seed preservation facility / storage

Availability of proper storage for seed is crucial to maintain the quality of seed. The SAP 2008 required production of six lakh MT of certified seeds to achieve the SRR of 25 per cent for paddy by 31 March 2012. Against this requirement, storage facility available with the OSSC was only 0.90 lakh MT (15 per cent) as of November 2011. During exit conference (November 2011) the Managing Director, OSSC stated that additional storage facility for another three lakh MT

seeds were being taken up under RKVY and added that even after its completion, there would be a net shortage of storage capacity of 2.1 lakh MT (33.3 *per cent*). No plan existed to meet the gap in requirement of storage capacity vis-à-vis targeted production of certified seeds.

During 2006-11, 37 seed storage godowns of 1000 MT capacity each were targeted for construction for which the Director placed (2006-11) ₹ 13.91 crore¹¹ with the OSSC. Out of the above, ₹ 8.33 crore had already been utilised but only 17 godowns were completed and put to use as of January 2012. While construction of three godowns¹² with estimated cost of ₹ 99.81 lakh was not started due to non-availability of land in one case and non-finalisation of contract in other two cases, remaining 17¹³ were under construction for over one to five years. The Managing Director, OSSC attributed (September 2011) the slow progress to low pace of construction by contractors (15 projects), cancellation of contract in one case and non-availability of land in four cases.

We are of the view that these factors, being under the control of the Department, were indicative of poor planning and monitoring of these works by the Director and the CCO-cum-Principal Secretary. Even if the farmers were to produce more quantities of certified seeds under the seed village scheme, they would not be able to store it because the OSSC would not be able to provide them adequate storage space. It is then ironical that the same OSSC was promoting the Seed Village Scheme by giving subsidy when it knew that it did not have storage capacity to purchase and store what is produced by these farmers.

4.1.7 Seed sales centres not opened in every Gram Panchayat

Availability of seed throughout the State was an important strategy in the SAP 2008 which targeted opening up of seed sale centres in each of the 6234 Gram Panchayats (GPs) of the State through a network of private seed dealers. However, it was noticed from the records OSSC that as of May 2011, sale centres were opened only in 1625 GPs (26 *per cent*) through 830 private dealers. In 12 out of 32 test checked agricultural districts, only 315 sale centres were available for 1503 GPs, the shortfall being 79 *per cent*. The remaining DDOs could not provide information on the issue, though asked for in Audit (April-July 2011).

The Managing Director (MD), OSSC attributed (May 2011) the shortfall to non-lucrative dealers margin, cumbersome documentation process and lack of godown facility at dealers' sale points. On the steps taken to tide over the situation, the MD stated (January 2012) that the seed sale centers had increased to 2254 in the State and the dealers' margin was approved by the Government on recommendation of State Pricing Committee. But, no records could be

¹¹ 2006-07: ₹ 50 lakh; 2007-08: ₹ 6.41 crore; 2008-09: ₹ 3.83 crore; 2009-10: ₹ 1.24 crore and 2010-11: ₹ 1.93 crore

¹² Parlakhemundi (two) and Sakhigopal

¹³ Anugul, Baripada, Berhampur, Bhadrak, Bhawanipatna, Jagatsinghpur, Jeypore, Jharsuguda I & II, Keonjhar, Khurdha, Nayagarh, Phulbani, Sundargarh, Kendrapada I & II and, Nuapada

shown to audit indicating that these bottlenecks had been brought to the notice of CCO-cum-Principal Secretary by the MD, OSSC.

It was brought to the notice of the CCO by audit in November 2011. Reply was awaited (July 2012).

4.2 Non-availability of quality seeds

As per the SAP 2008, quality (certified) seeds were to be supplied to the farmers at subsidised rates through the sale centres across the State as a strategy towards enhancing agricultural production. Based on the requirements projected by the range DDAs, the Director placed indent on OSSC, who after procuring the same mainly from outside sources, supplied them to the range DDAs at the rate approved by the Government. As per the standing instructions of the Director, the DDAs were to take the samples of seeds on day of receipt and send for testing in the State Seeds Testing Laboratory (SSTL), which in turn was to furnish the results of purity and germination viability within 15 days. The seeds found sub-standard were to be returned to the OSSC. It was emphasised that in no case should substandard seeds be sold to farmers. During 2006-11, the Director spent ₹ 65.35 crore towards seed-subsidy to the farmers.

We noticed that during the period, quality seeds were not supplied to farmers in time due to failure of OSSC in procuring certified seeds from outside suppliers even though certified seeds produced by farmers under Seed Village Scheme remained un-procured as discussed earlier. However, audit scrutiny revealed following irregularities and deficiencies.

4.2.1 Short supply of quality seeds

During 2006-11, the OSSC supplied only 153013 MT (87 per cent) of paddy seeds though the Director placed indent for supply of 176003 MT resulting in short supply by 22990 MT (13 per cent). Similarly, 3338 MT of pulse seeds (42 per cent) and 20153 MT of oil seeds (37 per cent) could not also be supplied by the Corporation during the 2006-11 as indicated in the Table 4 below:

Table 4: Indent and supply of seeds during 2006-11 (in MT)

Year	Paddy seeds			Pulse seeds			Oilseed		
	Indent	Supply	Shortfall	Indent	Supply	Shortfall	Indent	Supply	Shortfall
2006-07	16608	14943 (90)	1665	789	699 (89)	90	8153	1641 (20)	6512
2007-08	19535	20005 (102)	(-) 470	621	489 (79)	132	9895	2585 (26)	7310
2008-09	37403	30458 (81)	6945	1613	937 (58)	676	12485	8816 (71)	3669
2009-10	51722	43636 (84)	8086	2757	1004 (36)	1753	13020	11038 (85)	1982
2010-11	50735	43971 (87)	6764	2082	1395 (67)	687	11467	10787 (94)	680
Total	176003	153013 (87)	22990	7862	4524 (58)	3338	55020	34867 (63)	20153

(Figures in parentheses represent percentage achievement against indented quantity)

As may be seen from the table, supply of pulses seeds declined from 89 per cent of indent in 2006-07 to 36 per cent in 2009-10 and then increased to 67 per cent in 2010-11. However, supply of oilseeds considerably increased from 20 per cent in 2006-07 to 94 per cent in 2010-11.

The MD, OSSC stated (November 2011) that this was due to non-supply of seeds in time by suppliers of other States. He added that the gap between the

indent and supply was due to return of unsold stock to the OSSC. However, documentary evidence in support of lifting of any unsold stock by the OSSC from field DDAs and the reasons thereof could not be shown to Audit. Even if reply of MD, OSSC is considered, it indicated that the demand for seeds was not being assessed realistically by the Director at the State level and the DAOs at the district/ block level. In fact, non-lifting of seeds from OSSC by DDAs after these were procured by the OSSC resulted in wasteful expenditure and loss to OSSC and the Government.

The short supply of seeds contributed to shortfall in production of rice by 67.19 lakh MT, pulses by 3.15 lakh MT and oil seeds by 10.51 lakh MT against the targeted production of 420.68 lakh MT, 50.57 lakh MT and 42.15 lakh MT respectively during 2006-11.

4.2.2 Sale of sub-standard seeds

We noticed that in four (Puri, Sambalpur, Dhenkanal and Sundargarh) out of seven test checked DDAs, seeds of paddy, groundnut, mustard, *Biri(Urd)*, *Mung* and wheat weighing 6345.81 quintal supplied by OSSC during 2009-11 valued at ₹ 1.40 crore were sold by these DDAs to farmers before receipt of the test results. The seed samples were subsequently found to be of sub-standard quality by the State Seed Testing Laboratory (SSTL) with germination percentage varying between zero to 75 per cent against the prescribed norm of germination¹⁴

It was noticed that while despatch of samples for testing by the DDAs to SSTL took up to 99 days from the date of receipt, thereafter receipt of test results took up to 42 days. The above sale included sale of 110.70 quintal of paddy seeds to farmers during *Kharif* 2009¹⁵ by DDA, Sambalpur, which were received by the DDA on 23/24 May 2009. However, the samples were sent by him to SSTL on 17 September 2009 by which time the entire lot had already been sold to the farmers and sowing of the seeds was over. Besides, following instances of procurement and distribution of substandard seeds also came to our notice during audit:

- In Puri district 780 farmers were paid (March 2011) compensation of ₹ 25.16 lakh when sale of such sub-standard seeds came to notice of Department through farmers' complaint and media reports.
- Instructions (August 2010) of the Agriculture Minister to blacklist a central Public Sector Undertaking (PSU) for supply of substandard seeds was over looked. Contrary to the above instruction, OSSC procured different kinds of seeds worth ₹25.75 crore during *Kharif* 2011 from the same PSU indicating blatant disregard of instruction of the Agriculture Minister.

¹⁴ Rice: 80 per cent, Wheat : 85 per cent, Mustard : 85 per cent, Groundnut : 70 per cent, Biri (Urd) : 65 per cent, Mung : 75 per cent

¹⁵ *Kharif* season begins from the onset of the south-west monsoon and ends in September.

- In Balasore District, groundnut seeds of TAG 24 variety weighing 30.65 quintals costing ₹ 1.39 lakh which were supplied by OSSC to the farmers during 2009-10 (*Rabi* season) were found to be substandard as reported by SSTL. However, the farmers were not compensated (May 2011) even after a committee of Joint Directors recommended (June 2010) the same.

The Director stated (May 2011) that in the case of compensation to be paid to farmers in Balasore district the farmers' claim would be sent to the OSSC for making payment. The fact remained that despite deductions made by the Director from the bills of the OSSC on account of supply of substandard seeds over the years, the OSSC did not take any initiative in the matter. This indicated that the action of the CCO was grossly inadequate, as the larger issue of need of supply of quality seeds to farmers was not adequately addressed affecting the farmers adversely.

4.2.3 Sale of subsidised seeds without permits

To ensure the benefit of subsidised seeds reach the intended farmer, the Director instructed (June 2009) the Range DDAs to make arrangements for issuing permits to such farmers by the Village Agriculture Workers / Agriculture Overseer of the Blocks against which the sale centres were to sell seeds to the farmers.

Scrutiny of records of seven DDAs revealed that in three DDAs (Puri, Sambalpur and Sundargarh) sale of subsidised paddy, groundnut, maize seeds weighing 5703.56 MT¹⁶ valued ₹ 8.55 crore were effected during 2010-11 (*Kharif* and *Rabi*) through the sale centres without ensuring sales to the farmers who had been issued with the required permits. In reply, the DDAs promised to follow the instructions in future.

The Director stated (November 2011) that though instructions were issued for sale of subsidised seeds by issue of permits only, the seeds were sold to the bonafide farmers by way of personal identification through Departmental staff/Panchayati Raj Institution members maintaining sale registers at sale centre level due to otherwise shortage of extension staff and limited time period for sale of these seeds.

The reply was not tenable as in such cases identification of bonafide farmers were left to the discretion of the officials manning the sale points/centres. Besides, shortage of extension staff and seasonal sale was known to the CCO/Director much before the adoption of the strategy of issuing permits. Thus, the CCO/Director followed an incoherent, unplanned and ad-hoc strategy while operationalising the SAP. Reply of CCO-cum-Principal Secretary was awaited (July 2012).

¹⁶ Puri : ₹ 2.19 crore (paddy and Ground 732.38 MT), Sundargarh : ₹ 99 lakh (794.40 MT variety of seeds), Sambalpur : ₹5.37 crore (4176.78 MT of variety seeds).

4.3 Integrated nutrient management

As per the SAP 2008, chemical fertilisers as well as organic manures are to be used adequately and in a balanced manner to increase agricultural production in the State. As the fertiliser consumption was very low at 53 kilogram per hectare on an average in the State against the national average of more than 100 kilogram per hectare, the SAP 2008 envisaged promotion of ‘Integrated Nutrient Management’ through suitable programmes and incentives. Our review of this programme revealed the following.

4.3.1 Non-operationalisation of soil testing laboratories

As enhancement of soil health regime is crucial for raising productivity, the Department decided to set up more Soil Testing Laboratories (STLs) in the State and to make soil-testing facility available in all the blocks. The Department sanctioned setting up of 16 STLs and released ₹ 6.45 crore under RKVY (10: ₹ four crore during 2010-11) and State Plan (6: ₹ 2.45 crore during 2006-11). Out of this, ₹ 3.58 crore (RKVY: ₹ 1.13 crore and State Plan: ₹ 2.45 crore) (55 per cent) had been utilised as of August 2011 and four STL buildings were completed while remaining 12 were at various stages of completion. Though four laboratory buildings (Anugul, Keonjhar, Nuapada and Sonepur) were completed and instruments procured, none of these was made operational as of October 2011 due to lack of manpower.

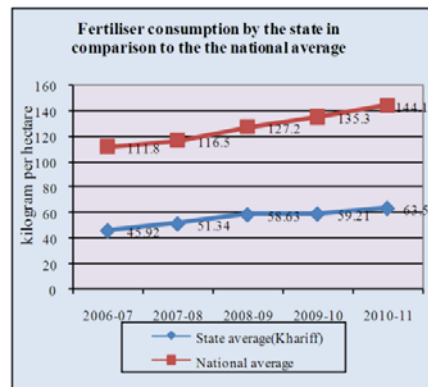
In reply, the Director stated (September 2011) that proposal for engagement of Agriculture Officers submitted (March 2011) to the CCO-cum-Principal Secretary was under consideration of the Government. The shortage of manpower, though a constraint, was a pre-existing condition which was not properly assessed and factored in while formulating the SAP 2008 and even while operationalising the same later. In the absence of a long-term perspective plan, this crucial aspect also remained unflagged and unattended. The AAPs also failed to take this issue into account.

The non-achievement of targets in most of the areas/interventions was attributed by the Director to shortage of staff. The CCO-cum-Principal Secretary failed to address the issue of staff shortage successfully although this problem was endemic in the Department.

4.3.2 Low fertiliser consumption

We noticed that during 2006-11, despite annual upward trend in the average consumption of fertiliser per hectare during *Kharif* in the State from 45.92 kilogram/hectare to 63.58 kilogram/hectare, it remained far below the national average of 112 to 135 kilogram / hectare during the period as depicted in the chart.

It was seen that though fertilisers like Urea, Muriate of Potash (MOP), Di Ammonium Phosphate (DAP) and complex fertilisers were being indented by the State from GoI, there was short lifting against the allocation by GoI of these fertilisers by 2.83 lakh MT (16.17 per cent) during *Kharif* 2009 and 2010¹⁷ against total allocation of 17.52 lakh MT by the GoI. Director stated (February 2012) that the supply was affected due to transport problem, inadequate storage space/railway rake points, labour problem and international market situations.



We noticed that the problems of short supply of fertilisers, shortage of rakes, less supply of MOP, non-provisioning for a buffer stock of fertilisers were repeatedly discussed in various fora like monthly review meetings of fertiliser manufacturers (16 and 20 May 2009), Crop Weather Group meetings (August 2010/2011) & fertiliser review meeting (21 June 2011). Despite the above, there was short supply against demand and allocation leading to lower consumption of fertiliser in the State. This indicated that effective steps were not taken to address the perennial problem of low consumption of fertilisers due to short supply which resulted in adverse impact on the production level as well as productivity of rice, pulses and oilseeds in the State.

The Principal Secretary stated (November 2011) that farmers were mainly using NPK fertiliser thereby depleting the soil regime though some of them also adopted traditional agriculture practices. We, therefore, view that a lot remained to be done by the Department in motivating the farmers to adopt a balanced micro nutrient and heavy integrated nutrient management approach to their agriculture by significantly augmenting the extension activity which, currently, was woefully deficient with very limited penetration of Agro Service Centres (ASCs) and huge shortages in Village Agriculture Workers as discussed in subsequent chapters.

4.3.3 Inefficient organic farming led to loss of central assistance

With a view to restoring soil health and fertility and preventing depletion of natural resource base, the GoI sanctioned (February 2008) ₹ 1.50 crore under the National Programme on Organic Farming (NPOF) and released (March 2008) in the first phase ₹ 37.57 lakh for establishment of 15 vermi-hatcheries, development of data base, market information centre, field demonstration of organic input, exposure visit of farmers and officials etc. Subsequent release of funds by GoI under the scheme was dependent on the submission of utilisation certificate and progress report in implementation of the projects. The State Bio-Chemist was the nodal officer for implementation of the scheme in the State.

¹⁷ The information on quantity of allocation made by GoI for *Kharif* (2007 and 2008)) and *Rabi* (2008) was not available with the Director of Agriculture.

Scrutiny of the records of State Bio-Chemist revealed that the Director allotted funds to the Bio Chemist in March 2008 but did not stipulate any period for implementation of the project. The Bio Chemist utilised only ₹ 32.63 lakh in 2008-09 for establishment of the 15 vermi-hatcheries and the Director submitted the utilisation certificate to the State Government in November 2010. No physical verification report was sent to the GoI (May 2011). In the meanwhile, the scheme was discontinued from 2009-10 due to which the Department had refunded (November 2010) unutilised amount of ₹ 4.94 lakh to GoI. Thus, due to the Director's failure to stipulate implementation period and subsequent failure to monitor the implementation and submission of UC/physical verification report, the Department lost opportunity of getting further central assistance of ₹ 1.12 crore.

The State Biochemist attributed (May 2011) the reason to delayed collection of information from the field executing agencies on implementation of the programme indicating failure of operational control system in the Department. However, no action was taken against the concerned executing agencies.

4.3.4 Failure to conduct evaluation study

The State Level Sanctioning Committee (SLSC) during 2007-11 sanctioned ₹ 5.14 crore under RKVY, for promotion of organic farming through establishment of 343 vermi-hatcheries at block level and 10350 vermi-compost units at block and village levels to be implemented by the State Bio-Chemist through the field Project Directors of Agriculture Technology Management Agencies (ATMA), DAOs and AAOs in the farmers' fields. The farmers were to be paid subsidy.

Scrutiny of records of the State Bio-Chemist revealed that the projects were executed utilising the full amount and subsidy was paid to the beneficiary farmers as per approved cost norms; utilisation certificates were also submitted to the Department. However, information on the number of units actually established, status of their functioning and production reports were not available with him. In the SLSC meetings held on May 2010, decision was taken for undertaking a quick evaluation study on functioning and utilisation of the vermi-compost units. Accordingly, the Department requested (November 2010) Odisha University of Agriculture and Technology (OUAT) to take up a study. However, the intended evaluation study report was awaited from OUAT as of March 2012 as complete list of beneficiaries was not made available by the Director to OUAT. Thus, the Director failed to monitor the establishment of the vermin-hatchery and compost units indicating slack supervisory controls over his field formations. Besides, the expected outcome of enhancing soil fertility, crop growth and yield as envisaged in the approved project proposals by implementing vermi-hatchery and vermi-compost units still remained unassessed (March 2012).

Chapter 5

Management of agricultural subsidy

5.1 Introduction

Subsidy plays an important role in encouraging and motivating the farmers to engage themselves in active agricultural activity. The SAP 2008 laid emphasis for providing suitable production incentive and distribution of subsidy for production/distribution of quality seeds, augmentation of irrigation through *Jalanidhi* programme and promotion of farm mechanisation.

The Department had a total budgetary expenditure of ₹ 1312.19 crore during 2006-11 which included ₹ 520.30 crore (40 *per cent*) of subsidy payments on (i) seeds (₹ 65.35 crore), (ii) *Jalanidhi* scheme (₹ 164.39 crore) and (iii) farm mechanisation (₹ 290.56 crore). We reviewed subsidy management on the above elements and our findings on *Jalanidhi* and farm mechanisation are discussed in the succeeding paragraphs.

5.2 *Jalanidhi* scheme

SAP 2008 envisaged providing assured irrigation to at least 35 *per cent* of cultivable land in each block by a suitable combination of flow irrigation and lift irrigation. The Agriculture Department had been encouraging execution of private lift irrigation points with the objective of increasing irrigation potential in the State for increasing productivity. The projects were being implemented in the State under the *Jalanidhi* scheme through Agriculture Promotion and Investment Corporation of Odisha Limited (APICOL); the nodal agency. The scheme provided subsidy to the farmers for sinking shallow tube wells (STWs), bore wells (BWs), dug wells (DWs) and river lift (RL) / surface lift (SL) etc. in their own fields up to 50 *per cent* with project cost limited to ₹ 20000, ₹ 50000, ₹ 50000 and ₹ 40000 respectively. The subsidy payment was met out of loan availed from National Bank for Agriculture and Rural Development (NABARD) under Rural Infrastructure Development Fund (RIDF).

The CCO placed funds of ₹ 176.89 crore with the APICOL during 2006-11 for administration of subsidy. The APICOL paid subsidy of ₹ 164.39 crore (93 *per cent*) to 87781 beneficiaries during the period. Review of the physical achievement and grant of subsidy revealed shortfall in achievement as well as irregular distribution of subsidy as below:

5.2.1 *Shortfall in achievement*

Test check of records of APICOL and 27 out of 32 DAOs test checked revealed that during 2006-11, there was shortfall in achievement ranging from 16 *per cent* under shallow tube well to 99 *per cent* under surface lift project in these 27 DDOs as indicated in Table 5 below.

Table 5: Target and achievement of private lift irrigation point during 2006-11
(In numbers)

Particulars	Target	Achievement	Shortfall	Percentage of shortfall
STW	9224	7751	1473	16
BW	11513	4160	7353	64
DW	14288	4372	9916	69
SL	2482	15	2467	99

(Source: information furnished by test checked DDOs)

The above shortfall was attributed by the DAOs (July 2011) to non-availability of bank loan to farmers for execution of STW, BW and DW projects and lack of perennial water source in case of surface lift projects. In reply, the Director stated (August 2012) that while targets for STW/BW/DW were set basing on ground water potential, targets for surface / river lifts were set keeping in view the existence of river/ drainage in each district.

The reply was not tenable in audit since the targets fixed were not realistic in view of the wide gap between targets and achievements except in case of shallow tube wells. Actual field conditions were not taken into account by Director/CCO while framing targets as the planning was not bottom up.

5.2.2 Irregular disbursement of subsidy and lack of transparency

As per the scheme guidelines, Private Lift Irrigation projects (PLIPs) like BW, DW, STW, SL/RL projects were eligible for availing subsidy only if executed in the land belonging to the beneficiary. Besides, as per instructions (July 2009) of the Director, photographs of PLIP in the presence of beneficiary, executants and the official of the implementing agency were to be taken to maintain transparency and prevent duplication after completion of the project. In 10 out of the 32 test checked DAOs, subsidy of ₹ 21.41 lakh was paid to 72 beneficiaries who did not have land records in their names. Besides, subsidy of ₹ 49.68 lakh was paid to 129 beneficiaries without maintaining transparency as photographs of the beneficiaries along with executants and the departmental representatives were not available despite instructions (July 2009) of the Director. District wise details are given in the Table 6 below:

Table 6: District wise details of irregular execution of PLIPs involving subsidy (Amount : ₹ in lakh)

Name of the Agricultural district	Beneficiaries who did not have the land in their name		cases of non-maintenance of transparency	
	In Number	Amount paid	In Number	Amount paid
Anugul	5	2.22	9	4.11
Berhampur	1	0.50	4	2.00
Jagatsinghpur	24	3.72	25	4.02
Jharsuguda	7	2.46	0	0
Karanjia	6	2.90	0	0
Khariar	0	0	66	32.88
Kendrapada	10	1.58	15	2.25
Keonjhar	13	5.71	0	0
Sambalpur	6	2.32	0	0
Sonepur	0	0	10	4.42
Total	72	21.41	129	49.68

(Source: Collected by audit during test check of DDOs)

Thus, failure to comply with the provisions of scheme led to irregular disbursement of subsidy of ₹ 71.09 lakh to ineligible persons. This requires thorough investigation by CCO-cum-Principal Secretary.

5.2.3 Irregular execution of shallow tube-wells (STWs) in barred saline affected zones

The Director, Ground Water Survey and Investigation (GWSI), Bhubaneswar recommended against digging shallow tube wells (STW) in 242 GPs in nine districts¹⁸ due to existence of saline ground water in these areas. Accordingly, the Director issued instructions (November 2008) for non-installation of shallow tube wells in these GPs.

However, in a meeting (17 January 2009) chaired by the Minister, Agriculture, it was decided to allow execution of STWs in saline affected GPs. This was to be done under the technical supervision of the Assistant Agriculture Engineer (AAEs) with the condition that the AAEs had to follow the technical specifications and ensure yield of sweet water. Test check of records of DAO, Jagatsinghpur revealed that 3960 STWs were executed during 2009-11 in the GPs of four blocks (Balikuda, Erasama, Kujanga and Tirtol). An amount of ₹2.74 crore, being subsidy for 2013 STWs installed during 2009-10, were paid (December 2009 to May 2010) by APICOL to farmers based on the recommendation of the concerned DAOs/AAEs. However, ₹ 2.72 crore being subsidy for 1947 STWs installed in the same blocks during 2010-11, were kept pending for payment at APICOL level based on direction (May 2010) of the Minister of Agriculture on the ground of receipt of several complaints regarding misutilisation and unscientific installation of these STWs.

Audit scrutiny revealed that neither the AAEs had given any certificate in support of yield of sweet water from those wells nor was there any further inspection by any higher authority including Principal Secretary (CCO) and the Director who had all concurred with the Minister's decision during the review meeting held on 17 January 2009. Joint physical inspection of 11 STWs conducted (October 2011) by Audit and Assistant Agriculture Officers/ Assistant Agriculture Engineers in the presence of beneficiaries revealed that in all 11 cases, the yield from these wells was saline water. The beneficiaries also expressed their dissatisfaction over the quantity and quality of discharge. Thus, subsidy payment of ₹ 2.74 crore during 2009-10 without requisite certificate from the AAEs was irregular.

We are of the view that the decision taken in the review meeting (17 January 2009) was erroneous, because it was not within the human competence of AAEs to ensure yield of sweet water when the ground water in the entire area was saline as determined by Director (GWSI) after a scientific exercise.

¹⁸ Balasore, Bhadrak, Cuttack, Ganjam, Jagatsinghpur, Jajpur, Kendrapada, Khurda and Puri.

5.2.4 Alleged misutilisation of subsidy and poor follow up action

We further noticed that based on complaints received from public regarding misutilisation of subsidy under *Jalanidhi* programme in five districts (Balasore, Cuttack, Jagatsinghpur, Jajpur, Puri) by showing old Private Lift Irrigation Points (PLIPs) works as new, the Minister of Agriculture instructed (August 2009) the CCO-cum-Secretary of the Department to conduct random physical verification of at least 10 *per cent* of PLIPs and pump sets in these districts within a month through teams consisting of concerned Project Directors of District Rural Development Agencies (DRDAs), NABARD officials, local Executive Engineer / Assistant Engineer (RWS&S) and one Joint Director of the Agriculture Directorate. Such a team was constituted (24 September 2009) by the CCO-cum-Secretary with the direction to submit the report by 31 October 2009. However, report of verification was received for only two districts (Puri in April 2010 for 172 cases and Jagatsinghpur in November 2011 for 432 cases). While no adverse findings were noticed by the team in Puri district, in 17 out of 432 cases verified in Jagatsinghpur district, irregularities like disposal of pump sets and pump sets physically available not matching with that supplied by APICOL were noticed. However, we found that no action was taken in these 17 cases despite irregularities being pointed out by the team. Verification reports from remaining three districts (Balasore, Cuttack and Jajpur) were not received as of February 2012 even after expiry of more than two years.

5.3 Farm mechanisation

As the Department perceived farm mechanisation to be crucial for improving agricultural productivity and moving from subsistence agriculture to a more commercial pattern, it promoted use of farm machinery as a vital strategy. Subsidy up to 50 *per cent* was provided on agricultural implements, sprinkler sets, tractors, power threshers etc. During 2006-11, ₹ 290.56 crore was spent on such subsidy on farm machinery sold to 232668 beneficiaries/farmers. It included subsidy payment for tractors (10527), power tillers¹⁹ (31975) and rotavators²⁰ (464).

5.3.1 We reviewed the management of subsidy in farm mechanisation and observed the following.

- **Outdated equipments** : In two (AAEs of Jeypore and Bolangir) out of 55 test checked DDOs, implements worth ₹ 6.47 lakh manufactured by departmental implement factory remained unsold since inception as these models became outdated ;
- **Unsold equipments**: Agriculture implements worth ₹ 31.45 lakh received from Implement Factory, Bhubaneswar up to March 2010 (Berhampur: ₹27.37 lakh, Sambalpur: ₹ 4.08 lakh) remained unsold in two test checked DDOs (Executive Engineers, (Agriculture), Berhampur and Sambalpur) as on March 2011;

¹⁹ Mechanised tillers used in farming

²⁰ Mechanised machinery used for sowing and harvesting

- **Damaged agriculture implements:** In three test checked offices, unused agriculture implements valued at ₹ 36.21 lakh (Berhampur: ₹ 12.06 lakh; Sambalpur: ₹4.79 lakh; and Anugul: ₹ 19.36 lakh) were lying in damaged condition due to prolonged storage. The reasons for prolonged storage without getting it repaired or replaced by Implement Factory could not be stated to Audit;
- **Misutilisation of subsidy and lack of monitoring:** The SAP 2008 provided for grant of subsidy at the rate of 50 per cent limited to ₹ 90000 per tractor with the stipulation that the same was not to be transferred within a period of three / five years from the date of purchase. Though subsidy of ₹ 27.63 crore was released by APICOL during 2006-11 on 10527 tractors, the utilisation was not monitored by the APICOL.

We feel that the concerned AAEs, as well as the MD, APICOL failed to exercise adequate monitoring over administration of this subsidy and its actual outcome in the field. Thus, Director/CCO failed to install a foolproof mechanism to oversee that the subsidised machinery were put to proper use.

5.3.2 Non-establishment of Agro Service Centres in backward districts

The SAP-2008 envisaged setting up of Agro Service Centres (ASCs) to provide doorstep services for farm mechanisation on hire basis. During 2006-11, 550 ASCs were established through the *Krishi Sahayak Kendras* of different districts and agricultural implements involving subsidy of ₹ 9.99 crore were provided to these ASCs by the Department. Director fixed the norm of at least one centre for each agriculture district. We noticed there were wide disparities in setting up of such centres since large number of centres were established in some coastal districts like Ganjam (102), Cuttack (84), Jagatsinghpur (75) and Jajpur (45) while such centres were very few in backward districts like Mayurbhanj and Gajapati (each 2), Nawarangpur (6), Sundargarh (3) Rayagada (7) and Koraput (9). No centres was established in seven agriculture districts of Phulbani and Malkangiri revenue districts.

The shortfall in the above seven agricultural districts was attributed (May 2011) by the MD, APICOL to non-receipt of proposals from these districts. As a result, the farmers of the above backward districts were deprived of proper guidance and benefits. In 15 test checked agriculture districts, 163 centres were established against the target of 468 centres. Despite instruction of the Chief Minister in a Strategy Committee meeting (28 October 2009) to establish large number of ASCs, no such centres was established in the two districts which were amongst poor districts with 16 per cent and 21 per cent of the population respectively depending on agriculture as the mainstay of their livelihood. Thus, Director/CCO failed to ensure establishment of ASCs after making assessment of requirement.

APICOL decided (26 December 2008) to conduct a study on the performance level of the ASCs. However, the same was not conducted as of January 2012. The Director of Agriculture despite being a member in the Board of Directors of APICOL failed to get the evaluation study done for over three years. Thus, the extent of effectiveness of the subsidy of ₹ 9.99 crore administered to these ASCs during 2006-11 remained unassessed.

Chapter 6

Implementation of schemes

The flagship schemes of Government of India like the National Food Security Mission, *Rashtriya Krishi Vikas Yojana* and Support to State Extension Reforms which were under implementation in the State during 2006-11 were reviewed by us and the audit findings are discussed in the succeeding paragraphs.

6.1 National Food Security Mission

The National Food Security Mission (NFSM), a hundred *per cent* centrally sponsored scheme, was launched in 2007-2008 with the main objective of increasing production of rice, wheat and pulses by ten, eight and two million tonnes respectively at the national level by the end of Eleventh Plan (2007-12) through area expansion and productivity enhancement on sustainable basis in the identified districts.

In Odisha, two components viz. NFSM (Rice) and NFSM (Pulses) were implemented (2007-08) in 15 districts and 10 districts respectively; the coverage of districts covered for pulses increased to 30 in 2010-11. The Institute on Management of Agricultural Extension (IMAGE) was the nodal agency for implementation of the scheme under the overall steering and monitoring of the State Food Security Mission Executive Committee (SFSMEC). Scheme funds were released by GoI in favour of IMAGE and after allocation of funds by the State Executive Committee; the same were released by the IMAGE to the District level authorities of the Agriculture Department. The DAOs were to submit progress reports and utilisation certificates (UC) to the nodal agency for onward transmission to the nodal department (Agriculture Department) for submission to the GoI after approval by the State Executive Committee. In the first meeting (March 2008) of the State Executive Committee, the State monitoring team headed by the Director of Agriculture was constituted for monitoring the activities of the Mission.

GoI released scheme funds of ₹ 195.50 crore which were utilised in full during 2007-11. This was a very good development from the point of view of implementation. However, we noticed several deficiencies in implementation of the scheme as discussed in the succeeding paragraphs.

6.1.1 Shortfall in achievement of targets for production under NFSM (rice and pulses) for the State

Keeping in view the targets fixed by the GoI for the country as a whole, the Department set a target of increase of production of rice and pluses by eight lakh metric tonnes and 87000 tonnes respectively by the end of 2011-12 over the production of 2006-07. The achievement of rice and pulses production during 2007-11 is given in the **Table 7** below:

Table 7: Achievement production of rice and pulses under NFSM in the State during 2007-11

Year	Rice (lakh MT)	Pulses (lakh MT)
2006-07 (Base year)	26.46	8.66
2007-08	30.22	9.08
2008-09	26.92	9.94
2009-10	26.05	9.62
2010-11	27.97	10.01

(Source : Records of the Director of Agriculture)

It could be seen from the table that production of rice in 15 districts covered under NFSM had remained almost at the same level during 2007-11 compared to the production of the base year 2006-07 and it was far away from the set target of 34.46 lakh metric tonnes i.e., production of 26.46 lakh metric tonnes during 2006-07 plus eight lakh tonnes increase targeted by the Department. However, the Department surpassed the targeted increase in production of 87,000 metric tonnes of pulses during the above period as the production increased from 8.66 lakh metric tonnes in 2006-07 to 10.10 lakh metric tonnes in 2010-11.

6.1.2 Shortfall in production and distribution of hybrid rice seeds

The scheme emphasised popularisation of hybrid rice cultivation through production, demonstration and distribution of hybrid rice seeds to the farmers to boost production. On proposal sent by the State Government, the GoI allocated ₹ 1.93 crore for this purpose during 2007-11 against which ₹ 1.43 crore were spent during the period. The details of production, distribution and demonstration of hybrid rice seeds during 2007-11 is given in the **Table 8** below

Table 8: Production, demonstration and distribution of hybrid rice seeds during 2007-11

Name of the intervention	Target	Achievement	Shortfall	percentage of shortfall
Production of hybrid rice seeds (in quintal)	200	0	200	100
Demonstration of technology (in numbers)	4688	4532	156	3
Distribution of hybrid seeds (in quintal)	2500	334	2166	87

(Source: Annual Progress Reports of the Mission Director, NFSM)

As indicated in the table above, there was shortfall in achievement under hybrid rice seed production (100 per cent), demonstration (three per cent) and distribution (87 per cent) during 2007-11.

6.1.2.1 Failure to produce hybrid certified rice seeds by OUAT

As per the scheme, the State Executive Committee was to decide the activities to be undertaken. The Committee decided (December 2007) to take up hybrid rice seed cultivation in three stages viz. (i) supply of breeder seeds²¹ to OUAT by the Central Rice Research Institute (CRRI), Cuttack, (ii) production of foundation seeds by the OUAT out of breeder, and, (iii) supply of foundation seeds by OUAT to OSSC for production of certified seeds for ultimate distribution to the growers.

We noticed that the OUAT could not provide foundation seeds to the OSSC owing to failure in producing such seeds despite supply of breeder seeds by the

²¹ Breeder seeds: Breeder seeds of a particular variety area produced by the research institutions of the State/Centre to be introduced for greater production

CRRI, Cuttack to them during *Rabi* 2008-09 due to non-synchronous flowering of the parental lines²². Subsequently, it was decided in the Mission Advisory Committee Meeting (March 2010) that the OSSC would procure breeder seeds directly from the CRRI, Cuttack and produce certified varieties under the technical supervision and guidance of the CRRI so as to make the State self sufficient in hybrid seed production. OSSC made an attempt to produce hybrid seeds on experimental basis at Bargarh Farm by procuring breeder seeds from the CRRI, Cuttack but failed as the required technical supervision and guidance of CRRI was not taken.

Thus, due to failure in monitoring the activities by the monitoring team headed by the Director and in which representatives of CRRI and OUAT were members, no production of hybrid rice seeds could be effected during the entire four year period 2007-11 depriving the farmers of the benefits of hybrid seeds.

6.1.2.2 Shortfall in distribution of hybrid rice seeds: Demonstration of hybrid technology was to be followed by distribution of hybrid rice seeds to farmers in the adjacent areas to facilitate adoption of the technology by them. There was also shortfall in distribution of hybrid rice seeds by 87 *per cent* as the OSSC could procure only 334 quintal of seeds from outside State against the targeted quantity of 2500 quintal during 2007-11 as:

- Supply order was not placed on Karnataka State Seed Corporation despite availability of the required variety of seed (KRH-2) with them during 2007-08; no reasons for the same were available on record.
- Only 290 quintals out of 731.80 quintal of hybrid rice seeds (KRH-2) procured during 2008-09 could be utilised due to delayed procurement by the OSSC.
- Only 44 quintals of hybrid rice seeds were procured during 2009-10, despite availability of the same with other State Seed Corporations while no procurement was effected during 2010-11 due to non-finalisation of tender.

Thus, lack of advance planning, delayed action and inaction on the part of the OSSC where the CCO was a member of the Board of Directors led to shortfall in distribution of hybrid seeds thereby failing to popularise hybrid rice cultivation in the State. Due to less distribution of hybrid seeds, the objective of boosting production was not fulfilled.

6.1.2.3 Demonstration vis-à-vis distribution

Demonstration of improved package of practices for hybrid rice was to be conducted in the farmers' field to create awareness about the improved practices followed by distribution of hybrid rice seeds to the farmers. Against the targeted 4688 demonstrations, the achievement was 4532 (97 *per cent*) during 2007-11. Scheme guidelines envisaged that each demonstration was to be carried out over 0.04 hectares for coverage of 100 hectares of neighbouring farmers and distribution of 15kg of seeds per hectare. During 2007-11, there

²² Non-flowering of male and female plants at the same time

were 4532 demonstrations which were meant for coverage of 4.53 lakh hectares requiring distribution of 67980 quintal of hybrid seeds. However, we observed, only 334 quintal of seeds (0.5 per cent) was distributed resulting in shortfall of 99.5 per cent under distribution due to (i) smaller target of 2500 quintals proposed for 2007-11 against requirement of 67980 quintal of hybrid seeds for carrying out 4532 demonstrations²³, and, (ii) less procurement of hybrid rice seeds by OSSC.

We further observed that the targets under demonstration during 2008-09 was increased to 2475 from 285 while that of distribution drastically reduced to 300 quintal from 500 quintal, reason for which, although asked for by the Government of India (February 2009), was yet to be furnished by the Department (March 2012). Thus, the implementation of the project was a complete failure in the State as the Department placed more importance on demonstration activities rather than distribution leading to unfruitful expenditure of ₹ 1.35²⁴ crore on 4510 demonstrations due to non-distribution of seeds.

6.1.3 Utilisation of older varieties of seeds

The guidelines envisaged use of recently released varieties of seed (i) not older than five years for demonstration and supply of mini kits for rice and (ii) less than 10 years for pulse varieties to boost production.

It was, however, noticed that each year during the four year period (2007-11), the Department went on seeking approval of the GoI for relaxation of the age limit of seeds to beyond 15 years for demonstration and distribution and up to 15 years for supply of mini kits which were ultimately approved by the GoI. The reason cited by the Department was that the older varieties were in demand by the farmers. This indicated that the CCO and the Director and their field functionaries like VAWs and AAOs engaged in extension services failed to motivate the growers for adoption of recently released varieties.

We are of the opinion that this assumed importance in the context of reduced production of rice under NFSM particularly during 2009-2010, when the total production went down to 26.05 lakh MT as compared to 26.46 lakh MT in 2006-2007.

²³ The 4532 demonstrations required distribution of 67980 quintals (4532 x 100 hectare X 15 kg per hectare) as per the norms prescribed for demonstration and distribution.

²⁴ Total distribution of Hybrid seed- 334 quintal or say 33400Kg. Area for which distributed-33400 kg/15 kg=2227 hectares, area for which not distributed: 453200 hectares-2227 hectares= 450973 hectares, Number of demonstrations involved= 450973 hectares/ 100 hectares =4510 demonstrations, Cost of demonstration for 4510 demonstrations = 4510 X ₹ 3000 = ₹ 13530000 or ₹ 1.35 crore.

6.1.4 Awards in favour of the State

The State received two awards from GoI under National Food Security Mission scheme viz. (i) Best performing State in the eastern region for 2007-2008 and 2008-2009 and (ii) *Krishi Karman* award as best performing State in food grain production during 2010-2011. We feel that the production of rice would have got a further boost had the focus been on production and distribution of hybrid rice seeds as contemplated under the NFSM scheme.

6.1.5 Expenditure on micronutrients

Deficiencies of micronutrients like zinc, boron, copper in soils have proved to be a major constraint to production and productivity. To obviate this it was envisaged in the NFSM guidelines to give assistance up to a maximum of ₹ 500 per hectare for two hectare to each farmer whose soil was deficient and had the micronutrient content below the critical limit as defined by the All India Soil and Land Use Survey (AISLUS). The above GoI organisation was declared as the nodal agency for identification of priority area for application of micronutrients in the identified districts of the State. The Indian Council of Agricultural Research, the National Bureau of Soil Survey and Land Use Planning, Nagpur and the Indian Institute of Social Science, Bhopal would also be involved in identification of priority areas. Based on the report of the AISLUS, GoI issued (2009) a guideline for use of micronutrients for correction of individual nutrient deficiency and for arresting its further spread in the following deficient districts of the State.

Table 9: Details of micronutrient deficient districts in Odisha

Sl.No	Micronutrient	Deficient districts
1	Zinc	Bolangir, Boudh, Kalahandi, Nawarangpur, Keonjhar
2	Boron	Bolangir, Baragarh, Cuttack, Ganjam, Jajpur
3	Copper	Kalahandi
4	Iron	No deficiency reported anywhere

(Source: Guidelines for use of micronutrients, soil ameliorants and integrated nutrient management practices in NFSM States)

It was noticed that during 2009-11, contrary to GoI guidelines, there was expenditure of ₹ 1.74 crore on assistance for micronutrients under Rice and Pulse components in several non-deficient districts (*Appendix-4*). This action might have disturbed the micronutrient balance already existing in these non-deficient districts as unnecessary use of one ingredient induces deficiency in other ingredient(s) as indicated in the GoI guidelines (2009) affecting future agricultural growth in these districts.

The Director stated (July 2012) the micronutrients were applied on recommendation of State Agriculture University according to which soils of Odisha are deficit in Boron and Zinc. The reply was not convincing since the deficiency of micronutrients were noticed only in the above identified districts by the AISLUS under NFSM.

6.2 Implementation of *Rashtriya Krishi Vikas Yojana* (RKVY)

The RKVY, a State Plan Scheme fully funded by the GoI, has been under implementation in the State from 2007-08 with the objective of providing incentives to the State for increasing public investment in agriculture, achieve the goal of reducing the yield gaps in important crops, maximise returns to the farmers and bring about quantifiable changes in the production and productivity of various agriculture and allied sectors etc. The eligibility of GoI assistance under the scheme depended on the amount provided in State plan budget for Agriculture and allied sector over and above the baseline percentage of expenditure incurred by the State Government on the sector prescribed on the basis of certain parameters. Scheme guidelines prescribed at least 75 per cent of the allocated amount was to be proposed under Stream–I for specific projects and up to 25 per cent was available to the State under Stream–II for strengthening the exiting State sector schemes and filling specific the resource gaps.

The scheme guidelines provided the Agriculture Department as nodal department which was to effectively co-ordinate with other departments and implementing agencies for preparation, appraisal of projects, implementation, monitoring and evaluation at regular intervals. The GoI released assistance to Institute on Management of Agriculture Extension (IMAGE), the nodal agency for implementation of the programme in the State. The State Level Sanctioning Committee (SLSC) headed by the Chief Secretary was responsible for sanctioning and monitoring the progress of sanctioned projects/scheme. After approval of projects by SLSC, IMAGE released funds to implementing agencies (IAs) for the implementation of projects and received utilization certificates from them along with quarterly progress reports for onward submission of the same to GoI through the nodal department.

6.2.1 *Submission of inflated Utilisation Certificates*

The State Government received GoI assistance of ₹ 547.93 crore during 2007-11 for taking up projects under the scheme. Of the above, an expenditure of ₹546.63 crore was incurred and utilisation certificates (UC) sent to GoI as of December 2011. The expenditure included ₹ 300.02 crore incurred by the Director of Agriculture for implementation of 55 projects of which only 41 projects were completed by him and the remaining 14 projects were in different stages of completion (December 2011). However, audit scrutiny revealed that in respect of 20 approved projects, against the release of ₹ 96.55 crore, UCs for only ₹ 55.11 crore were submitted and UCs for the balance ₹41.44 crore were not submitted by the implementing agencies as of February 2012 as detailed in *Appendix-5*. This indicated that the UCs sent to GoI by the Department were not based on the actual expenditure incurred and UCs furnished by the implementing agencies.

In reply the Director, IMAGE stated that the UCs were submitted after release of funds to the implementing agencies with the intention of receiving further central assistance (RKVY) from GoI. This indicated that the CCO did not exercise any further control to revalidate the UCs resulting in submission of inflated UCs to GoI. This was a patently irregular practice of financial reporting

and is prone to diversion and misutilisation of funds being overlooked or remaining undetected for long.

6.2.2 Non-utilization of RKVY funds

The SLSC sanctioned (2009-11) ₹ 5.82 crore for implementation of eight projects relating to improvement of poultry farm, infrastructure development in OUAT, cold chain management, horticulture mechanisation, construction of market yard etc. The IMAGE placed the funds with the implementing agencies during October 2009 to June 2010. However, due to non-initiation of the projects by the implementing agencies, the SLSC withdrew the sanction orders and sanctioned (2011-12) the funds for utilisation under a new project "Bringing Green Revolution in Eastern India (BGREI)". The Director, IMAGE received back the funds between December 2011 and January 2012 from the implementing agencies after they had retained the same with them for periods ranging from 16 to 25 months. The details are given at the *Appendix-6*.

Thus, due to poor planning and failure to coordinate the implementation of the projects by the Department and the IMAGE, scheme funds amounting to ₹5.82 crore remained unspent with the implementing agencies for about two years depriving the State of contemplated infrastructure and research benefits for which the funds were initially sanctioned.

6.2.3 Profiling of secondary and micro nutrients in soils

The SLSC sanctioned (March 2009/October 2009) the RKVY project "Profiling of secondary and micro-nutrients in soils of Odisha" involving collection of soil samples and soil testing. It envisaged preparation of soil fertility maps up to gram panchayat level that would help to formulate appropriate nutrient management strategy for sustainable crop production and to act as a guiding tool for improvement of soil health. The project was to be taken up at a cost of ₹ 1.45 crore in a mission mode by the Joint Director (Extension), State Nodal Officer, to be completed in two years.

Scrutiny of the records of the Director revealed that against the target of collection of 60,000 soil samples from all over the State, only 49,110 samples (82 *per cent*) were collected and analysed after incurring an expenditure of ₹ 1.65 crore. There was shortfall of 10,890 samples (18 *per cent*) of the target fixed; the project remained incomplete due to vacancy of post of Analyst and non-functioning of instruments in the laboratory for some time and delay in collection of samples.

The Director stated (February 2012) that the project was likely to be completed by August 2012. Since its outcome would be of significant benefit to the state's efforts to develop a balanced micronutrient regime for different soil types in the State, the Department should complete the work without further delay..

6.2.4 System of Rice Intensification - shortfall in conducting training

Under RKVY, the System of Rice Intensification (SRI) scheme was introduced (2007-08) by the State Government in partnership with NGOs as an innovative programme, with a view to promoting a new method of paddy cultivation requiring lower seed rate and less utilisation of water and pesticide. Under this scheme, the SLSC sanctioned ₹ 2.60 crore during 2007-09 and the entire

amount was utilised by the concerned DAOs. The scheme initially focussed on demonstration-cum-training in farmers' fields.

Up to March 2011, demonstrations over 94,420 hectares (1.6 per cent of cultivated area under paddy²⁵) were carried out and 232450 farmers were imparted training. The SRR of paddy also improved from 6.40 per cent in 2006-07 to 19.07 per cent in 2009-10. We further observed that in 29 test-checked agriculture districts, out of 95140 farmers trained through demonstrations, 66977 (70 per cent) farmers adopted the system which was pretty encouraging considering that this was an innovative approach being introduced in the agriculture sector for the first time in the State. However, the following deficiencies were noticed with some of the DAOs:

- **Belated training:** Three DAOs (Sambalpur, Karanjia and Jashipur) received ₹ 8.70 lakh during 2010-11 for conducting training of 360 farmers for two days, i.e. one day before land preparation and another day after seven days of transplanting in *Kharif* season. However, these trainings were held with delays ranging from one day to two months by which time, land preparation and transplanting were already completed. Besides, impact evaluation of the training was not conducted despite requirement under the programme guideline and instructions (January 2010) of the Director. The delay was attributed by the concerned DAOs to difficulty in arranging trainings with limited staff. But in view of the fact that such staff limitation was already known to the DAOs; they should have taken contingent measures.

- **Soil testing before and after demonstration not done:** The SLSC (RKVY) headed by the Chief Secretary in their meeting (21 October 2010), made soil testing in each demonstration mandatory to ensure that application of nutrients would be as per the requirement of the crop. Guidelines of SRI also required soil testing to be conducted before and after demonstration to evaluate the extent of consumption of fertilizer, chemical use etc. But three DAOs, (Ghatagaon, Sonapur and Jagatsinghpur) did not conduct any such soil testing despite utilising ₹ 22.15 lakh on SRI demonstration and training during 2009-11. Thus, the entire exercise was infructuous as the technique of scientific application of fertiliser to reduce consumption sought to be established by adopting this innovative approach was not demonstrated to the farmers.

The DDOs could not justify the reason for not conducting soil testing. In reply, the Director assured (November 2011) to issue necessary instructions to the field officers to avoid any such deficiencies in future. The replies of the Director appeared casual and vague since he had not even enquired about the reasons for such a situation and would therefore not be able to take proper and adequate corrective action. The CCO-cum-Principal Secretary has not furnished any reply (July 2012).

²⁵ 60.44 lakh hectares cultivated area in 2010-11.

6.2.5 Absence of information on sector-wise fund flow including SC, ST and women category

In the SLSC meeting (18 October 2008) of RKVY decision was taken for giving priority to women and weaker sections of the society while implementing RKVY projects. Besides, the GoI also required (24 April 2009) that the State Government maintain a database reflecting allocation of RKVY resources amongst Scheduled Castes (SC), Scheduled Tribe (ST) and women beneficiaries separately for monitoring purposes.

Accordingly, the Director instructed (27 July 2010) all executing agencies and State nodal officers to submit reports on programmes, targets and achievements showing flow of RKVY funds among the above categories of beneficiaries as this was essential for programme planning, execution for achieving social justice, parity and equality and to ensure upliftment of the under privileged social segments. But no such information/database was available with the Director for the projects implemented during 2007-11 (March 2012). Thus, despite instructions of the SLSC and the GoI, the CCO / Director failed to monitor the important issue of targets and achievements relating to the SC, ST and women category of the population.

6.2.6 Incomplete Agriculture market infrastructure

SAP 2008 envisaged establishment of market yards under the Regulated Marketing Committee within the next three years covering 118 Blocks in the State which did not have market yards. During 2007-11, under RKVY, ₹ 7.35 crore was placed with the Co-operation Department for establishing 12 market yards including cotton markets and maize *mandi* in different districts. Utilisation certificate for ₹ 6.38 crore was submitted (October 2011) by Regulated Market Committees (RMCs) functioning under Cooperation Department. The maize *mandis* at Umerkote and Raigarh and Cotton Market yards at Parlakhemundi and Digapahandi were completed and made functional during 2009-11. Remaining eight market yards (Bahadajhola, Banki, Boudh, Digapahandi, Gunupur, Parlakhemundi, Rahama and Udala) were not completed (October 2011). Though Odisha State Agricultural Marketing Board (OSAMB) was responsible for monitoring the infrastructure development aspects undertaken by the RMCs, yet the progress of construction was monitored neither by OSAMB nor by Director of Agriculture.

The Director could not furnish any reply on the plea that these matters were being dealt with by the Co-operation Department (November 2011). This argument was not acceptable since the money was given to Co-operation Department by the Agriculture Department and the granter had every right to monitor the pace of progress of the projects being undertaken through these grants. Not doing so was indicative of ineffective monitoring of one of the crucial activities for development of agriculture and farmer's welfare in the State.

6.3 Support to State Extension Reforms

Under the Centrally Sponsored Scheme of "Support to State Extension Programmes for Extension reforms" launched in 2005-06 with 90 per cent central assistance, an autonomous institution 'Agriculture Technology Management Agency (ATMA)' was to be set up in each district. The governing body of the Agency was to provide overall policy direction for implementation of extension reforms by way of imparting training to farmers through extension functionaries (VAWs and AAOs) involving them in exposure visits, demonstrations, exhibitions etc. for capacity building of farmers. The Management Committee of ATMA was to look after implementation of the scheme. District Farmers' Advisory Committee has to be set up in each district to provide farmers' feedback for district level planning and implementation including preparation of strategic research and extension plan through dedicated staff. Besides, *Krushak Sathi* at village level and wherever available Agri-Entrepreneurs were to be encouraged for these activities and farm schools were to be set up as a mechanism for farmer-to-farmer extension at three to five focal points in every Block. The Department received ₹ 71.30 crore under the scheme (including ₹ 7.05 crore state share) 'Support to Extension Reforms' during 2006-11 of which ₹ 65.86 crore (92 per cent) were utilised.

We reviewed the extension reform activities in the test checked agriculture districts and noticed the following deficiencies / good achievements.

6.3.1 *Absence of adequate manpower support to Agriculture Technology Management Agency (ATMA)*

ATMAs were set up (2005-08) in all the 30 districts of the State, registered under Society Registration Act 1860. As per the revised guidelines²⁶ (June 2010) of the GoI each ATMA unit at the district level was to be constituted with a core staff of five officials viz., (i) Project Director (one), (ii) Deputy Project Directors (two), (ii) Accountant-cum-Establishment clerk (one) and (iv) Computer programmer (one). We noticed that the DDAs of concerned districts were declared as Project Directors (PD), ATMA. Besides, out of the sanctioned strength of 60 Deputy PDs, 30 were not filled up (January 2012). Similarly, the posts of Accounts clerk and Computer Operator, though permitted under the scheme to be filled up on outsourcing basis, were not filled up (January 2012). Instead, a clerk of the DDA's office was entrusted with accounting and other support responsibilities in each ATMA, in addition to his own duties. As a result, ATMAs failed to really take off in discharging its assigned duties and block and district level effective strategic plans as required could not be prepared by them; besides affecting the demonstration of modern technology and dissemination of package of improved agricultural operations in the field.

6.3.2 *Training of farmers*

Training to farmers are provided by the departmental officials for upgrading their knowledge in agriculture technology and capacity building. Under this programme farmers training is organised by the Department through the extension functionaries and experts at the village, block, district and State level. At the village level the training are provided to the farmers as required under

²⁶ Support to State Extension Programmes for Extension Reforms Scheme 2010 of GoI

various schemes like NFSM, RKVY and Work Plan schemes. At the Block level, capacity building of farmers was carried out by the Block Farmers Advisory Committee and at the district the Agriculture Technology Management Agencies (ATMA) and at the State level, trainings are organised by the IMAGE through the Departmental officials. During 2006-11, 11.78 lakh farmers were trained at an expenditure of ₹ 11.12 crore against a target of 3.71 lakh farmers.

- **Shortfall in establishing farm schools:** The SAP 2008 laid emphasis on promoting farmer to farmer learning by setting up farm schools in the field of progressive farmers. For providing on-site training to other farmers by way of demonstration during 2008-11, against a target of 1736 farm schools, only 1235 (70 per cent) were established utilising ₹ 4.87 crore. Reasons for shortfall was stated (September 2011) by the DDOs to be want of funds. Similarly, there was a target of 1200 farm schools in 173 blocks in the 27 test checked DAOs for providing on-site training to 32,595 farmers. As against this, 1096 (91 per cent) such schools were set up during this period and 31781 (98 per cent) farmers could be trained. This was a good achievement from the point of view of educating farmers on better agricultural practice for improved yield.

- **Unfruitful practical training without agricultural implements:** In the Regional Institute of Training and Extension, Bolangir, 2132 extension staff were trained during 2007-10. Though the training institute was having adequate physical infrastructure, yet the practical training on modern methods in agriculture was imparted to the trainees without any agricultural implements / machinery. When we pointed this out (June 2011), the Principal of the training institute requested (June 2011) the Director to supply the required implements for use in training. In reply, the Director assured (November 2011) to supply the required implements to the training institute soon. Both these actions indicate the sloppy manner in which the organisation treated the serious issue of practical training of extension staff.

6.3.3 Shortfall in achievement of establishment of Farm Information and Advisory Centres in Blocks

As per SAP 2008, one Farm Information and Advisory Centre (FIAC) was to be set up in each of the 314 blocks of the State which would function as knowledge centres for dissemination of information on latest technology including package of practices for boosting agricultural production and productivity. Each FIAC would have two wings, i.e., Block Farmers Advisory Committee (BFAC) and Block Technology Team (BTT). Block Technology Manager was to act as the team leader of the BTT and was to consult BFAC for the preparation of Block level strategic agriculture plan.

We noticed that though 314 Block Technical Managers and 628 Block Level Technical Assistants were sanctioned for all the centres of the State, yet no such manpower was provided to FIACs of any block as of January 2012.

We also noticed that against the requirement of 314 such centres, buildings for only 200 were targeted for construction at a cost of ₹ 60 crore under RKVY scheme for which only ₹ 31.33 crore was paid to Executive Engineers (Agriculture). As of March 2011, ₹ 27.97 crore was utilised and buildings for only 87 centres had been completed. Out of this, only 61 buildings were handed

over to the DAOs/AAOs as of April 2012. The shortfall in establishing 13 FIACs was attributed to non-finalisation of sites owing to local problems while the remaining 100 FIACs were under construction.

During physical verification of two buildings (Barkote and Jharbandh) by Audit along with the concerned AAE / AAO, both were found to be idle due to want of electrification and pending court case respectively. Thus, due to lack of infrastructure and staff, the interventions contemplated under the agriculture policy remained largely unachieved or under-achieved.

6.4 Evaluation and impact assessment of schemes implemented

The NFSM guidelines (August 2007) provided for concurrent evaluation every year by the State Statistical Department to assess the performance of the scheme. We noticed that in March 2010 i.e., more than two years after first evaluation became due, Director took up the matter with Bureau of Economics and Statistics to conduct such evaluation. Records indicating such evaluation taken up by the latter was not available on record. After lapse of further one year, the Director entrusted (May 2011) the evaluation study for the years 2009-10 and 2010-11 to a Delhi based firm for completion within 90 days. However, no such evaluation report was received as of March 2012 despite the firm being reminded by the Director in November 2011.

The guidelines of RKVY scheme required the SLSC to initiate evaluation studies from time-to-time as may be required. Keeping this in view the SLSC in its meeting, (21 May 2010) instructed the Agriculture and P&C Departments to put in a third party monitoring and evaluation mechanism. Accordingly, the Department assigned sector wise impact evaluation of implementation of the scheme engaging third party monitors. The final report on the Horticulture sector alone was received by the Department, as reports on other sectors like command area development projects of Water Resources Department, extension of distribution system of lift irrigation projects, popularisation of agricultural implements/pump sets, power tillers were in draft stage. The reports on farmer oriented activities like capacity building (Agriculture sector), development of watersheds (Soil Conservation sector) and projects on Animal Husbandry sector were yet to be received (August 2012).

The Centrally sponsored plan scheme 'Support to Extension Reforms' guidelines required that third party monitoring and evaluation was to be got done annually by engaging suitable State Agencies of the State and the evaluation reports sent to the Department of Agriculture and Cooperation, GoI. The State Government conducted the impact assessments of the implementation of the Extension Reforms during 2006-08 and 2008-10 and a concurrent evaluation during 2008-09. One of the major constraints pointed out by the evaluation studies was lack of personnel for the posts of Project Directors and Deputy Project Directors in the ATMA offices. Although the GoI had provided funds for posting of exclusive project Directors and two Deputy Directors, only one post of the Deputy Director for each ATMA has been filled and the post of Project Director could not be filled due to lack of suitable officers.

Chapter 7

Human resource management

7.1 *Vacancies in post of field functionaries*

To bridge the knowledge deficit of farmers in the areas of modern technology and improved package of practices, the Department emphasized on strengthening the extension machinery through re-training and re-tooling of existing extension personnel. Assistant Agriculture Officers (AAOs) at block level and Village Agriculture Workers (VAWs) at GP level are the officers providing agricultural extension services at the cutting-edge level. The Department was also equipped with an engineering wing for providing technical support to farmers at the field level as well as for development of agricultural infrastructure.

We noticed that 412 (46 *per cent*) out of 902 posts of AAOs, 1413 (44 *per cent*) out of 3218 posts of VAWs and 68 posts of Subject Matter Specialists (25 *per cent*) in the State remained vacant as of March 2011 which *inter-alia* gravely affected extension programme. Such large-scale vacancies affected agricultural extension activities in the test-checked agriculture districts as ₹ 58.86 crore under various schemes like NFSM, RKVY, Extension Reforms etc. remained unspent.

Similarly, we noticed that under the Engineering wing, three posts of Executive Engineer (15 *per cent*), 111 posts of Assistant Agriculture Engineer (33 *per cent*) were lying vacant. Besides, in the eighth State Level Sanctioning Committee (RKVY) meeting (23 May 2011), Director indicated that ₹ 28.15 crore relating mostly to infrastructure development remained unspent due to shortage of Assistant Engineers.

In reply, the Director admitted (November 2011) that agricultural extension work had been affected due to such vacancies. He added that Government had permitted (January 2011) to fill up 1413 posts of VAWs on contractual basis and action had been initiated for filling up 117 posts of AAOs and that 1100 posts of VAWs had already been filled up; the remaining posts could not be filled up as the matter was sub-judice.

Though acute shortage of staff was prevailing prior to SAP 2008, yet the same was not considered while framing the SAP 2008 and most of the strategies set out therein were oblivious of this field reality especially while framing strategies on farmers' training, demonstration, knowledge dissemination etc. In the exit conference (November 2011), we pointed out that the issue of staff shortage prevailing for over two decades was not considered in the SAP 2008 and no strategy was proposed to meet this challenge. The CCO-cum-Principal Secretary agreed that a separate strategy to meet this challenge needed to have been framed.

Chapter 8

Internal control system

8.1 Ineffective internal control system

Internal controls are an integral component of organization's management process which is designed to provide a reasonable assurance to the management that operations are carried out in an effective and efficient manner, financial reporting and operational data are reliable and applicable laws and regulations are complied with so as to achieve the organizational goals and objectives. Besides, internal audit, as an independent entity within or outside the department, was required to examine and evaluate the level of compliance to the departmental rules and procedures so as to provide independent assurance to senior management on the adequacy of risk management and internal control framework within the department.

Audit reviewed the internal control systems including internal audit in the Department and is of the opinion that the system largely remained ineffective and there were instances of non-compliance with financial Rules by most of the test checked DDOs. Further, monitoring by the CCO was very lax and ineffective.

Budgetary and financial controls

8.2 Inadequate budgetary controls

Review of budgetary provisions and actual expenditure incurred during 2006-11 revealed that out of the total budget provision of ₹ 1518.10 crore, the Agriculture wing utilized ₹ 1311.19 crore resulting in savings of ₹ 206.91 crore as indicated in Table 10 below. The total provisions included both plan and non-plan provisions.

Table 10: Budgetary provision and drawal during 2006-11

(₹ in crore)

Year	Original provision	Supplementary provision	Total provision	Expenditure	Savings	Percentage of saving
2006-07	142.81	4.42	147.23	137.23	10.00	7
2007-08	240.15	40.10	280.25	204.54	75.71	27
2008-09	230.72	55.44	286.16	254.33	31.83	11
2009-10	353.18	19.73	372.91	322.64	50.27	13
2010-11	386.41	45.14	431.55	392.45	39.10	9
Total	1353.27	164.83	1518.10	1311.19	206.91	14

(Source: Information furnished by the Director of Agriculture, Odisha)

Director stated (May 2011) that the substantial savings of 27 per cent in 2007-08 was due to non-receipt of sanction / short release of funds by GoI compared to provision made, less area coverage in implementation of schemes, non-acceptance of bills by treasury, non-supply of materials by suppliers under Centrally sponsored Plan schemes, indicating improper and unrealistic budget estimates and expenditure controls by the Department.

➤ Unnecessary supplementary provision

During 2006-11, in 24 cases of minor heads, the entire supplementary provision of ₹ 2.80 crore under salary component was unnecessary and was later surrendered (*Appendix-7*). The Director stated (November 2011) that these

funds were surrendered due to non-sanction of increments, leave, non-fixation of pay in the revised pay etc. However, this did not explain the reason for seeking supplementary provisions when adequate funds already existed for the current level of activity.

8.3 Non-compliance with financial and treasury rules and service codes

Each head of the department is responsible for enforcing financial order and strict economy at every step. He is responsible for observance of all relevant financial rules and regulations in his department.

During 2006-11, out of ₹ 1107.29 crore available with 55 test checked DDOs ₹ 874.24 crore were utilised leaving ₹ 233.05 crore (21 per cent) unutilised as on 31 March 2011. These funds relating to different schemes under implementation and pay and allowances were unspent mainly due to large-scale vacancies. Review of funds management by different DDOs revealed that funds were not managed economically and efficiently as evidenced by unauthorised expenditure without budgetary provision, parking of funds in non-interest bearing accounts etc. as discussed below.

The Director, while noting the audit observation for guidance stated (November 2011) that effective steps would be taken to avoid future financial irregularities. The fact however remained that neither the Director nor the CCO-cum-Principal Secretary had ever reviewed and monitored expenditure in their department though rules explicitly assigned the responsibility of budget management to the controlling officer of the grant.

➤ **Unauthorised expenditure without budgetary allocation**

The Odisha Treasury Code Vol I (SR 241) required that all charges actually incurred must be paid and drawn at once and under no circumstances may they be allowed to stand over to be paid from the grant of another year. Contrary to the said provision, 27 out of 55 test-checked DDOs incurred expenditure of ₹ 26.81 lakh on office contingencies, wages, petrol, oil, lubricants etc during 1993-2011 without budgetary allocation from the available cash showing the expenditure in the closing cash balance as 'paid vouchers' (*Appendix-8*).

Neither the CCO nor the Director had put any mechanism in place for fixing responsibility on the erring officials and recovering such amounts spent without legislative sanction from these officials.

In reply, the Director stated (November 2011) that the DDOs were instructed not to repeat such practice in future. The reply appeared very casual and vague as regularisation of such unauthorised expenditure was awaited.

➤ **Irregular management of advances:** Codal provision (SR 509 of Odisha Treasury Code volume I) prescribed that advances granted for departmental and allied purposes were to be recovered within one month from the date of advance. Audit scrutiny revealed that in 52 out of 55 DDOs test checked, advances of ₹ 183.30 crore remained unadjusted as of March 2011 (*Appendix-9*). This included advances of ₹ 74.34 crore outstanding for more than one to 32 years out of which ₹ 61.72 crore pertained to office of the Director of Agriculture alone. Further analysis revealed that the above advances includes ₹ 1.34 crore outstanding against 255 ex-employees for one to 28 years.

The above total advances included ₹ 149.38 crore advanced by the Director to APICOL during May 1997 to March 2011 towards subsidy component remaining outstanding due to non-submission of UCs by it for want of recommendation from DAOs on implementation of the various projects assigned/entrusted to them. Non-adjustment of these advances was prone to defalcation and mis-appropriation, besides entailing a presumptive minimum yearly loss of interest amounting to ₹ 3.09 crore to the exchequer at four *per cent* per annum applicable to savings bank account.

Though the DDO were responsible for recovery/adjustment of advances, they could not explain the reason for non-recovery/non-adjustment of the same. In the exit conference, the Principal Secretary assured to recover/adjust the above outstanding amounts. However, fact remains that the CCO-cum-Principal Secretary had failed to get this monitored on a regular basis as a result of which advances were pending for such unusually long period.

➤ ***Irregular parking of scheme funds in civil deposit***

Codal provisions (SR 242 of Odisha Treasury Code volume I) prohibited drawal of funds without immediate requirement and to prevent lapse of budgetary allocation. We noticed that 25 out of 55 test checked DDOs drew ₹6.80 crore from the treasury during 1970-71 to 2003-04 without immediate requirement for payment and parked the same in civil deposits. Of which a substantial amount of ₹5.63 crore related to office of the Director of Agriculture.

As per the Finance Department instructions (July 2010) all these amounts up to 2004-05 were lapsed and no longer available to the DDOs for drawal. The DDOs were still showing these amounts under civil deposits in their books of accounts. Parking of scheme funds in civil deposits and its subsequent credit to Government account as revenue is an example of poor fund management.

➤ ***Irregular retention of scheme funds in current accounts with banks resulting in loss of interest:***

Contrary to the prudent financial management practices, 51 out of 55 test checked DDOs retained scheme funds of ₹ 32.79 crore in current account with banks as on 31 March 2011 instead of in interest bearing account of any nationalized bank. DDOs who retained substantial amounts of scheme funds in current accounts were (i) DDA, Bolangir (₹ 1.31 crore); (ii) Executive Engineer, Central Zone, Bhubaneswar (₹ 10.33 crore); (iii) Executive Engineer, Berhampur (₹ 2.26 crore) and (iv) Executive Engineer, Agriculture, Sambalpur (₹ 8.22 crore). Keeping Government money in current account of banks entails yearly loss of interest amounting to ₹ 1.31 crore at four *per cent* per annum applicable to savings bank account.

➤ ***Mis-utilisation of interest:*** As per RKVY operational guidelines, interest earned on scheme funds was to be treated as additional resources for the schemes and was to be utilised in implementation of the schemes. During audit, it was noticed that the IMAGE utilised interest of ₹ 36.42 lakh earned on RKVY funds for (i) civil works of the mini-conference hall at Rajiv Bhavan ₹ 19.83 lakh and (ii) repair and renovation of IMAGE Hostel No-1 ₹ 16.59 lakh. Similarly, the Director, Agriculture spent (2010-11) interest of ₹ 13.90

lakh earned on NFSM funds for civil works as decided in the meeting (March 2010) of the State NFSM Advisory Committee.

The Director, IMAGE stated (September 2011) that the expenditure was incurred with the permission of the Chairman, IMAGE (Principal Secretary). The Director of Agriculture Stated (July 2012) that the State Food Security Mission Executive Committee in a meeting approved the work and the minutes of the meeting was sent to GoI for specific approval. The reply was silent about receipt of GoI's approval. The replies were not tenable since even the State Government did not have the authority to make inadmissible expenditure from GoI scheme funds like RKVY, NFSM etc. This also reflected poorly on the administrative and supervisory control that was exercised by the Government over IMAGE, when the former itself approved such inadmissible expenditure.

➤ **Non-recovery of license fees:** Government order (January 1999) provided that on transfer, a Government employee could retain his quarter at the old station on payment of flat license fee for one month and standard licence fee for subsequent two months. However, four out of 55 DDOs did not recover house license fee amounting to ₹ 5.78 lakh from the salary of 49 employees / ex-employees from 1998-99 onwards in respect of Government accommodation availed by them as of March 2011. Out of the above, a sum of ₹ 5.21 lakh (90 per cent) relating to the office of the Director IMAGE was pending for recovery from 43 employees since December 2008. The concerned DDOs were responsible for non-realisation of the house licence fee from the employees / ex-employees. This indicated that the internal control mechanism in place for adherence to the Government order was not robust. The CCO-cum-Principal Secretary needed to look into this.

➤ **Non-deposit of revenue into Government account:** As per the provisions of the Odisha Treasury Rules, all revenues realised were to be deposited into Government account immediately and not later than three working days. However, though Executive Engineer, (Agriculture), Berhampur deducted ₹ 5.15 lakh from contractors' bill towards royalty during 2009-11, he did not deposit the same into the treasury until July 2011. Similarly, ₹ 11.49 lakh, being the cost of tender papers realised by Executive Engineer (Agriculture), Sambalpur during May 2010 to March 2011, were not remitted to Government account until July 2011.

8.4 Idling of "Failed bore well compensation scheme" funds of ₹ 3.12 crore

"Failed bore well compensation scheme" (February 2001) was intended to indemnify the farmers against failure of bore wells for which risk premium at the rate of ₹ 3000 was to be collected from the beneficiary prior to the execution of the well, credited to "Failed Bore well Compensation Fund" and compensation at a maximum of ₹ 30000 was to be paid to the farmer in each case of failure of the bore wells. As of March 2011, an amount of ₹ 3.12 crore was accumulated in the fund maintained by the APICOL in commercial banks and no fund was utilised out of the same since 2009 in absence of any claim for compensation. Neither the Director nor the CCO reviewed the matter which led to idling of funds of ₹ 3.12 crore at the hands of the APICOL in absence of any clear guidelines / instructions for making investments to meet future claims.

8.5 Inadequate monitoring of funds released to Implementing Agencies

We noticed that though during 2007-11, IMAGE released ₹ 14.59 crore to Odisha University of Agriculture and Technology (OUAT) and ₹ 3.87 crore to Odisha State Agriculture Marketing Board under RKVY scheme for carrying out infrastructure works and research projects, yet the status of execution was not properly monitored by Director, IMAGE / Principal Secretary.

In reply the Director, IMAGE (the consultant of State level RKVY Cell) stated (July 2011) that the Dean, Research and Extension, OUAT was requested (May 2011) to indicate the reasons for blockage of RKVY funds, final reply was still awaited (October 2011). It was rather ironical that, IMAGE swung into action only after the same was brought to its notice by Audit in May 2011.

This indicated that CCO-cum-Principal Secretary as head of the Department and chief of the accountability set up of the Government did not monitor the activities of IMAGE.

8.6 Inadequate Internal Audit

Internal Audit wing was functioning in the Department under the Financial Advisor (FA) of the Department with sanctioned strength of one Internal Audit Officer in the rank of Under Secretary, two Audit Officers, eight Audit Superintendents and 64 Auditors. The internal audit wing after completion of their audit assignments reported the findings to the audited units through Internal Audit Reports (IARs) and watched compliance to the same. However, we observed that 28 posts of Auditors (44 *per cent*) were lying vacant as on 31 March 2011. Audit noticed that out of 98 DDOs planned for coverage during 2009-10 (58) and 2010-11 (40), only 34 DDOs were covered in these two years.

Review of the Internal Audit Reports (IARs) of the above 34 DDOs revealed that IARs relating to nine DDOs (26 *per cent*) were not issued for more than seven months (October 2011). Of the remaining 25 DDOs, in six cases, the IARs were issued within a year, in 17 cases after one year and in two cases after two years of completion of audit. These 25 IARs contained 464 paragraphs with money value of ₹ 17.36 crore which included suggestion for recovery of ₹ 3.31 crore including advances of ₹ 2.90 crore. Despite such serious audit findings, first compliance was not received (October 2011) for all these 25 IARs issued during June 2011 to October 2011. The Financial Advisor attributed (October 2011) late issue of IARs to shortage of typists, Auditors and engagement of audit staff in conducting special audits. The CCO-cum-Principal Secretary had also not reviewed the position (October 2011).

Thus, not only was internal audit inadequate and response to audit was poor but also the follow-up action of these IARs was close to non-existent reflecting very poorly on the importance assigned by the CCO-cum-Principal Secretary to such vital instrument of internal control mechanism in the Department.

We further noticed that no 'Internal Audit Manual' was prescribed; the Financial Adviser could not furnish any reason for the same.

8.7 Ineffective vigilance control and low disposal of disciplinary cases

Internal vigilance cell of the Department had not been made operational though one Deputy Secretary had been declared (July 2010) as the Chief Vigilance Officer of the Department. Instances of misappropriation of Government money, fraud, theft and embezzlement cases were dealt by the confidential branch of the Department and were referred to ‘Commissioner for Departmental Enquiry’ for appropriate action. As on 1 April 2006, 30 disciplinary cases were pending to which another 22 were added during 2006-11. Of this 17 cases were finalised during 2006-11 Besides, in the remaining 35 unsettled cases, 17 cases were pending for more than five years and three for more than 10 years. The position of 35 unsettled cases was as under:

- in three cases, enquiry officer has not been appointed for more than six months,
- in 22 cases, enquiry officer were appointed but report not submitted for over three months to nine years,
- in six cases, report from enquiry officer were received but proceedings not finalised for over eight months to nine years,
- in three cases departmental proceeding was suspended due to conviction of delinquents in court of law, and
- one case was pending in vigilance court,

This was indicative of absolute lax of oversight by the CCO over vigilance and disciplinary cases in the Department which, in our opinion, does not augur well for the all over vigilance control environment in the Department.

8.8 Inadequate inspection and monitoring

The system of inspection and monitoring of the performances of DDOs by the CCO-cum-Principal Secretary and Controlling Officers and Deputy Directors of Agriculture were reviewed in Audit. We are of the opinion that both inspection and monitoring were neither adequate nor effective as evidenced by the following:

- The CCO-cum-Principal Secretary had not fixed any norm for inspection of the office of the Director, Agriculture and the same had never been conducted during 2006-11.
- Against the target of conducting inspection of 177 DDOs by the Controlling Officer (Director) during 2006-11, only 32 inspections (18 *per cent*) were conducted. However, no norms were fixed for such inspections. In reply, the Director stated that some officers of the Directorate have been nominated as Nodal Officers to carry out inspection work in addition to their own duties. The reply did not explain the reason why the nodal officers failed to follow the instructions.
- As per instruction of the Director, all the 30 nodal officers were to visit the 30 revenue districts assigned to them once in a month. There was shortfall in visit of Nodal Officers to the field offices by 25 *per cent*

during 2009-10 and 33 *per cent* during 2010-11. Nodal Officers were to report to the Director about problems faced by field offices for remedial action. But test check revealed that the nodal officers reported 13 problems of the field offices to the Director and discussed in the nodal officers' meeting during 2010-11, but no follow-up action was taken by the Director. No reason for non-redressal of problems was furnished by the Director.

- Similarly, the test checked Range Deputy Directors conducted only eight inspections as against 71 programmed by the Director for them during 2006-11, resulting in shortfall of 89 *per cent* of inspections. The reason for such shortfall was stated (July 2011) by them to be pressure of work. Although the CO assigned the Deputy Directors with inspection work each year specifying the offices to be inspected, no norms were fixed for the same.

Director issued instructions to the Range Deputy Directors of Agriculture (November 2011) to conduct annual administrative inspection of field offices. However, regular inspection of sub-ordinates by their seniors and culminating in inspections of the Directorate by the CCO-cum-Principal Secretary as an instrument of exercising administrative oversight and guidance was totally missing. Thus, it was evident that decisions taken by the CCO-cum-Principal Secretary relating to the growth and development of agriculture of the State were not based on ground realities.

Chapter 9

Conclusion and recommendations

9.1 Conclusion

- Despite the SAP 2008 containing a clear agenda for agricultural development in the State for the next 10 years and instructions of the Chief Minister, the CCO did not prepare a long-term perspective plan for operationalising the same and bottom up planning was completely missing in the annual action plans prepared by the Director without consulting the comprehensive district agriculture plans.
- 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 private land for industrial purposes. Even the District Collectors under Revenue Department acquired private land for industries without consulting the Agriculture and Water Resources Departments which also contributed to decline in cultivated area.
- Despite increase in the irrigation potential of the State from all sources uniformly to 30.36 lakh hectares in 2010-11, only 20.85 lakh hectares (69 *per cent*) of such land was under crop cultivation was an area of concern.
- Though Seed Replacement Rate of the major crop rice showed gradual increase in the State, the productivity of rice as well as pulses and oilseeds remained much below the national average affecting the targeted production.
- There was less supply of quality seeds to the growers than what was required by them. Instances of sale and distribution of sub-standard seeds, resultant crop loss and payment of compensation arising out of sale of substandard seeds, sale of seeds to persons without permits and mis-utilisation of subsidy under *Jalanidhi* programme came to our notice during test check of the records of DDOs.
- Opening of seed sales centres in all the 6234 Gram Panchayats was one of important strategies in SAP 2008; these centres were not opened in 4609 GPs affecting the objective of doorstep supply of seeds to the farmers.
- Fertiliser consumption in the State remained much below the national average. Despite the instructions of SLSC for undertaking evaluation study on implementation of organic farming projects like vermi hatcheries/composts under RKVY, the same remained unmonitored and unevaluated for over two years due to want of full list of the beneficiaries with the office of the Director of Agriculture.
- Infrastructure development under agriculture was slow due to non-operationalisation of soil testing laboratories despite completion, slow pace of construction of seed storage godowns, neglect in establishment of agro service centres particularly in the backward districts, delay in completion / commissioning of seed processing facilities and seed testing and certification facilities although funds were not a constraint.

- Construction of agricultural market yards entrusted to the agencies of the Co-operation Department remained unmonitored by the Agriculture Department leading to slow pace of completion of the same.
- Dedicated officials were not posted as Project Directors in all the 30 ATMA of the State; there were vacancies in the posts of a Deputy Project Director and two ministerial staff in each ATMA despite the same were permitted by GoI under the 'Support to State Extension Reforms Scheme' affecting the functioning of the ATMA.
- As against the requirement of buildings for FIACs in each of the 314 Blocks, construction of only 200 such buildings was targeted. However, only 61 could be completed due to slow pace of construction by contractors and non finalisation of sites.
- While the required annual concurrent evaluation of implementation of NFSM scheme in the State was not undertaken since the implementation of the scheme in 2007-08; the third party evaluation reports on the execution of RKVY projects under different sectors as required under the instruction (May 2010) of State Level Sanctioning Committee (SLSC) were yet to be received.
- Extension service to farmers by the Department affected due to long pending large-scale vacancies in the posts of VAWs and AAOs as this issue had not been factored while framing the SAP 2008.
- Budgetary as well as financial controls were found to be unsatisfactory as many instances of non-compliance with the provisions of Odisha Budget Manual, financial, treasury and service codes by test checked Drawing and Disbursing Officers (DDOs) were noticed.
- Instances of OSSC failing to procure seeds produced in seed village scheme, APICOL not monitoring the proper usage of the subsidised farm machineries supplied to beneficiaries and OUAT not utilising funds provided for infrastructure development and research were noticed.
- Internal audit system was found to be weak and ineffective and the system of inspection and monitoring was not adequate. Internal vigilance mechanism was lethargic with 35 cases pending for one to ten years. The Department seemed to move rudderlessly without adequate oversight by the CCO over its activities - both operational and administrative.

9.2 Recommendations

- The CCO may formulate a long-term perspective plan on priority basis to implement the strategies outlined in the SAP 2008 indicating annual achievement of specific milestones for each activity;
- The objectives set out in the SAP 2008 may be re-visited with focus on moving towards more participative, community ownership and innovation-oriented strategies in various key areas of input supply, storage, distribution, quality training and demonstration activities.

- Coordination among Agriculture, Water Resources and Revenue Departments may be ensured while acquiring agricultural / irrigated land for industrial use and Cooperation Departments on aspect of agricultural marketing;
- The CCO may streamline the seed procurement system for preventing procurement and supply of substandard seeds, evolve an effective monitoring system on procurement of seeds by OSSC under seed village scheme and from outside the State and managing subsidy on farm mechanisation and *Jalanidhi* scheme by APICOL;
- The CCO needs to address the all pervading issue of staff shortages, particularly at the level of Assistant Agriculture officers and VAWs etc. as it has had a serious adverse impact on extension services, demonstrations and trainings in this sector;
- Internal control mechanism need to be strengthened to ensure adherence to budgetary and expenditure controls as per the codal provisions. System of inspection of field DDOs and monitoring of their performance by the CO and CCO need to be put in place and follow up action insisted upon on the results of such inspections. Internal audit may be made effective by ensuring timely audits and their follow up.

Bhubaneswar
The

(Amar Patnaik)
Accountant General (G&SSA)
Odisha

Countersigned

New Delhi
The

(Vinod Rai)
Comptroller and Auditor General of India

Appendix-1

(Refer Paragraph 1.3 at page 3)

Statement showing the details of productivity of rice during 1997-2011

Year	National (Qtls/Ha)	State (Qtls/Ha)	Percentage of shortfall of State average over National average
1997-98	19.00	13.90	27
1998-99	19.21	12.12	37
1999-2000	19.86	11.27	43
2000-01	19.01	10.41	45
2001-02	20.79	15.89	24
2002-03	17.44	7.59	56
2003-04	20.77	14.96	28
2004-05	19.84	14.55	45
2005-06	21.02	15.54	26
2006-07	21.31	15.57	27
2007-08	22.02	17.20	22
2008-09	21.78	15.53	29
2009-10	21.30	16.09	24
2010-11	22.40	16.21	28

(Source: Odisha Agriculture Statistics 2009-10 and Directorate of Economics and Statistics, Department of Agriculture and Cooperation for 2010-11)
Qtl: Quintal, Ha: Hectare

Appendix-2

(Refer Paragraph 1.6 at page 4)

List of Test checked DDOs covered under CCO based Audit of Agriculture wing of Agriculture Department

Sl.No.	Name of the Unit
1	Principal Secretary to Government of Odisha, Agriculture Department.
2	Executive Engineer, Central Zone, Bhubaneswar.
3	Deputy Director of Agriculture, Koraput Range, Jeypore
4	Deputy Director of Agriculture, Bolangir
5	Principal RITE, Bolangir
6	District Agriculture Officer, Berhampur
7	Subject Matter Specialist, Cotton, Berhampur
8	District Agriculture Officer, Bhadrak
9	District Agriculture Officer, Balasore
10	Soil Chemist, Cuttack
11	District Agriculture Officer, Kendrapada
12	District Agriculture Officer, Keonjhar
13	District Agriculture Officer, Champua
14	District Agriculture Officer, Ghatagaon
15	District Agriculture Officer, Sonapur
16	District Agriculture Officer, Jagatsinghpur
17	District Agriculture Officer, Khariar
18	Deputy Director of Agriculture, Puri
19	Deputy Director of Agriculture, Sambalpur
20	District Agriculture Officer, Sambalpur
21	District Agriculture Officer, Jharsuguda
22	District Agriculture Officer, Udala
23	District Agriculture Officer, Titilagarh
24	District Agriculture Officer, Karanjia
25	District Agriculture Officer, Jashipur
26	State Bio-Chemist, Bhubaneswar
27	Joint Director Agriculture, Information, Bhubaneswar
28	Director, Agriculture & Food Production, Odisha, Bhubaneswar
29	Assistant Project Officer, Oil seeds, Bhubaneswar
30	Deputy Director of Agriculture, Cuttack
31	Deputy Director of Agriculture, Dhenkanal
32	District Agriculture Officer, Anugul

Sl.No.	Name of the Unit
33	Sugar Cane Development Officer, Bargarh
34	District Agriculture Officer, Bargarh
35	Deputy Director of Agriculture, Sundargarh
36	Soil Chemist, Sundargarh
37	Executive Engineer, Agriculture. Berhampur
38	Executive Engineer, Agriculture. Sambalpur
39	District Agriculture Officer, Rairangpur
40	District Agriculture Officer, Bangiriposhi
41	District Agriculture Officer, Nayagarh
42	District Agriculture Officer, Parlakhemundi
43	District Agriculture Officer, Gunupur
44	District Agriculture Officer, Athagarh
45	District Agriculture Officer, Soro
46	Soil Chemist, Balasore
47	Entomologist, Banki
48	District Agriculture Officer, Bhawanipatna
49	Soil Chemist, Bhawanipatna
50	District Agriculture Officer, Dharmagarh
51	District Agriculture Officer, Koraput
52	District Agriculture Officer, Jeypore
53	District Agriculture Officer, Phulbani
54	District Agriculture Officer, Kuchinda
55	District Agriculture Officer, Sundargarh

Appendix- 3
(Refer paragraph-2.6 at page 8)
Statement showing the details of outlay under Eleventh five year plan (2007-12) and budgetary allocation during the period under various Centrally Sponsored Plan and State Plan schemes (Agriculture Department)
(₹ in lakh)

Sl No.	Name of the scheme	SP/ CSP	Objective	Eleventh five year plan outlay (2007-12)	Budgetary allocation during				Total
					2007-08	2008-09	2009-10	2010-11	
1	Agriculture Policy	SP	Agricultural Policy Resolution 1996 emphasises setting up of commercial agri-enterprises. Funds are being earmarked to provide subsidy under APR-6 (Capital Investment Subsidy to agri-entrepreneurs)	325.06	0.01	500.00	500.00	1000.02	
2	Grant-in-Aid to APICOL	SP	Agricultural Promotion and Investment Corporation of Odisha Ltd. Has been created as a specialized institution to implement the State Agricultural Policy, particularly APR 6 and 3 including providing consultancy for agro-entrepreneurship.	0.05	0.01	55.00	50.00	160.01	
3	Strengthening of Regional Training Institutes/Soil Testing Laboratories/Implements Factories	SP	The Directorate of Agriculture has 3 Regional Training Institutes, 13 Adaptive Research Stations/Laboratories. These institutions engage themselves in imparting intensive Training, Soil Testing and Under taking development work in the field of Agriculture.	420.00	84.00	200.00	100.00	474.00	
4	Input subsidy	SP	To ameliorate the suffering farmers in case of severe natural climatic or pest menace. It is proposed to provide subsidised inputs to farmers in the form of seeds, fertilisers, pesticides and plant protection equipments.	480.00	90.00	1000.00	2000.00	4590.00	
5	Negotiable Loan	SP	The State Government has taken a loan from NABARD under RIDF for sinking of STW/MTW/BW in a massive way with provision of subsidy up to 30% for STWs and MTWs and up to 50% for Bore wells.	6491.28	1297.69	3168.00	2000.00	6465.69	
6	Agriculture Research and Education Grant to OUAT	SP	Grant-in-Aid is being provided to OUAT for imparting education in Agricultural and Allied Science and for undertaking various researches and also for infrastructure Development.	2057.80	380.00	0-	0	380.00	
7	Agricultural Marketing	SP	To strengthen /develop agricultural marketing infrastructure at the market yard through out the State.	500.00	95.97	0-	0	95.97	
8	Crop Insurance	SP	Under the scheme all farmers both loanee and non-loanee-irrespective of the size of their holding are covered under the scheme which covers risk in respect of loss of yield to crops	673.00	100.00	0	0	100.00	

Sl No.	Name of the scheme	SP/ CSP	Objective	Eleventh five year plan outlay (2007-12)	Budgetary allocation during					
					2007-08	2008-09	2009-10	2010-11	Total	
			due to natural calamities, like flood, cyclone, storm, hailstorm, pest attack and diseases and other non-preventive risks like natural fires and lightning.							
9	Special programme for KBK Districts	SP	The scheme includes bio-fertiliser and vermi-compost in watershed areas, strengthening of soil testing laboratory, Diversification of Agriculture crops in water shed areas, Increasing seed replace Ratio on HYV paddy in water shed areas.	1200.00	700.00	205.02	89.70			994.72
10	RKVY		The scheme under RKVY are being implemented as State plan schemes with 100% Central assistance since 2007-08.,	9000.00	9000.00	2304.19	2467.20			13771.39
11	Popularisation of Agriculture Implements and machineries	SP	To enhance farm mechanization among the resource poor farmers.	0	0	2500.00	3000.00			5500.00
12	Refresher training for extension functionaries	SP	The objective of upgrading the knowledge and skill of the agril-extension.	0	0	28.40	0.01			28.41
13	Jalanidhi	SP	The objective is to increase the productivity is provision of assured irrigation facilities.	0	0	0	5000.00			5000.00
14	Promotion of SRI	SP	The objective is to enhance rice production by increasing water use efficiency and economising use of quality seeds and other inputs.	0	0	0	160.00			160.00
15	Macro Management Mode of Agriculture (Work Plan)	CSP	The funding pattern of the scheme is 10:90 between state and centre, Macro Management of Agriculture includes scheme for Rice Development, Sugar cane Development, Ragi Development, and Agricultural Mechanisation.	10291.53	2500.00	2534.34	3902.70			10914.64
16	Intensive Cotton Development Programme	CSP	To provide assistance on field demonstration, farmers training, IPM demonstration, Surveillance of Pest and Disease, Seed treatment, supply of bio-agent and bio-pesticides etc. for cotton and fibre crops.	1040.81	248.50	235.00	224.00			907.50
17	Jute Technology Mission (Mini Mission-II)			0	165.82	191.20	195.00			552.02
18	ISOPOM	CSP	The Oilseed production programme (OPP), National Pulses Development Programmes (NPDP), Accelerated Maize Development Programme (AMDP) and Oil palm Development Programme (OPDP) have been merged into a single scheme christened as ISOPOM (Integrated Schemes of Oilseeds, Pulses, Oil palm and Maize. The objectives of the scheme are to provide assistance on production and distribution of quality seeds, block demonstration, IPM	7806.02	3752.98	4500.00	4004.00			13756.97

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Sl No.	Name of the scheme	SP/ CSP	Objective	Eleventh five year plan outlay (2007-12)	Budgetary allocation during				
					2007-08	2008-09	2009-10	2010-11	Total
19	Support to state extension programme for extension reforms	CSP	demonstration, farmers training, PP equipments etc for increasing coverage under all crops. This scheme was introduced in 13 districts of the state in 2005-06 through IMAGE. In the eleventh five year plan the scheme will be extended to the remaining 17 districts. A token amount of Rs.0.05 lakh and Rs. 0.01 lakh have been proposed for eleventh five year plan and annual plan 2007-08 respectively.	0.05	1500.00	2828.23	295.00		4623.24
20	Support to State Extension Programme for Reforms AGRISNET Project	CSP	The objective of the scheme is to provide improved service to the farming community through use of ITC. The tentative outlay of this project is Rs.3.5 crore which includes 100% Govt. of India assistance.	0	200.00	0	0	0	200.00
21	Development and strengthening of infrastructure for production and distribution of quality seeds	CSP	The objective of scheme to increasing the seed replacement rate by producing quality seeds in the state in more area through providing financial assistance to cultivators/seed growers towards seed cost, storage bin and training etc.	0	545.50	0	0	0	545.50
22	National Project on Promotion of Organic Farming	CSP	The objective of the scheme to establishing Model organic farms, field demonstrations , training, vermin culture hatchery, bio-gas slurry preparation	0	250.00	0	0	0	250.00
23	Strengthening and Modernisation of Pest Management	CSP	The objective in the scheme is to modernize 3 nos of Bio-control Laboratories for rearing and production of bio agents at Kendrapada, Jagatsinghpur and Bhubaneswar	0	120.00	0	0	0	120.00
24	National Project on Fertilizer Quality Control	CSP	The objective of the scheme is to strengthen and develop the infrastructure facilities for fertilizer testing to ensure supply of good quality of fertilizer to the farmers besides checking of environmental pollution.	0	15.00	0	0	0	15.00
25	National Food Security Mission	CSP	To enhance production and productivity of Rice and Pulse crops in selected districts of the state in Mission mode.	0	17195.56	0	0	0	17195.56
26	Support to State Extension Programme for Reforms AGRISNET Project	CP	The objective of the scheme is to provide improved service to the farming community through use of ITC. The tentative outlay of this project is Rs.3.5 crore which includes 100 per cent Govt. of India assistance.	0	0	200.00	229.00	0	429.00
27	Promotion and strengthening agricultural mechanisation through training, testing and	CP	The objective of the scheme is to produce prototype of industrial design of agriculture implements and their trials besides making them popular among farmers by imparting training on use and maintenance and conducting	0	40.00	60.00	103.12	0	203.12

Sl No.	Name of the scheme	SP/ CSP	Objective	Eleventh five year plan outlay (2007-12)	Budgetary allocation during				Total
					2007-08	2008-09	2009-10	2010-11	
	demonstration.		demonstrations.						
28	Development and strengthening of infrastructure for production and distribution of quality seeds	CP	The objective of scheme is to increasing the seed replacement rate by producing quality seeds in the state in more area through providing financial assistance to cultivators/seed growers towards seed cost, storage bin and training etc.	0	0	600.00	622.32	1222.32	
29	National Project on Promotion of Organic Farming	CP	The objective of the scheme is to establish model organic farms, field demonstrations , training, vermiculture hatchery, bio-gas slurry preparation	0	0	0.01	11.63	11.64	
30	Strengthening and Modernisation of Pest Management	CP	The objective in the scheme will be to modernize 3 nos of Bio-control Laboratories for rearing and production of bio agents at Kendrapada, Jagatsinghpur and Bhubaneswar	0	0	0.01	50.00	50.01	
31	Post Harvest Technology & Management	CP	The objective of the scheme is to reduce post-harvest losses and to educate farmers on quality management.	0	0	37.84	179.92	217.76	
32	National Food Security Mission	CP	To enhance production and productivity of Rice and Pulse crops in selected districts of the state in Mission mode.	0	0	17195.56	7647.34	31126.90	
	Total			40285.6	5725.28	26653.24	30830.94	121061.39	

CSP: Centrally Sponsored Plan Schemes, SP : State Plan schemes

Appendix- 4

(Refer paragraph 6.1.5 at page 33)

Statement showing details of payment of incentive for supply of micronutrient to ineligible districts under NFSM scheme during 2009-11

(I) Component: Rice (Area: in hectare, expenditure: ₹ in lakh)

Sl No	Name of the district	2009-10		2010-11		Total	
		Area	Expenditure	Area	Expenditure	Area	Expenditure
1	Sundargarh	0	0	2478	12.39	2478	12.39
2	Phulbani	500	2.5	1500	7.5	2000	10
3	Anugul	210	1.05	229	1.14	439	2.19
4	Nuapada	2550	10.25	7273	20.00	9823	30.25
5	Dhenkanal	880	4.40	3600	18.00	4480	22.4
6	Nayagarh	0	0	370	1.48	370	1.48
7	Jharsuguda	1536	7.68	2752	13.76	4288	21.44
8	Malkangiri	0	0	2483	12.41	2483	12.41
9	Deogarh	0	0	800	4.00	800	4
	Total A	5676	25.88	21485	90.68	27161	116.56

(II) Component: Pulses (Area: in hectare, expenditure: ₹ in lakh)

Sl.No	Name of district	2009-10		2010-11		Total	
		Area	Expenditure	Area	Expenditure	Area	Expenditure
1	Nayagarh	300	1.5	320	1.60	620	3.1
2	Khurdha	2055	10.27	0	0	2055	10.27
3	Puri	2565	12.82	675	2.20	3240	15.02
4	Rayagada	1080	5.39	440	2.20	1520	7.59
5	Bhadrak	0	0	280	1.40	280	1.4
6	Dhenkanal	0	0	272	1.36	272	1.36
7	Deogarh	0	0	120	0.59	120	0.59
8	Gajapati	0	0	280	1.40	280	1.4
9	Jagatsinghpur	0	0	230	1.10	230	1.1
10	Jharsuguda	0	0	315	1.2	315	1.2
11	Kendrapada	0	0	360	1.80	360	1.8
12	Koraput	0	0	224	1.12	224	1.12
13	Mayurbhanj	0	0	2000	5.20	2000	5.2
14	Phulbani	0	0	480	2.40	480	2.4
15	Sundargarh	0	0	704	3.52	704	3.52
	Total B	6000	29.98	6700	27.09	12700	57.07
Grand Total (A + B)						173.63	

Appendix-5

(Refer paragraph 6.2.1 at page 34)

Statement showing incorrect reporting through submission of inflated Utilisation Certificates

(₹ in lakh)

Year	Name of the Implementing Agencies (IA)	Name of the project	Funds released to implementing agencies	UC submitted by Government of Odisha to GoI	Expenditure incurred by implementing agencies (IAs)	UC submitted by the implementing agencies (IAs)	Balance amount for which UC not submitted by IAs to GoO Col. (5-7)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
2007-08	Water Resources Department	Budhabudhiani Project	511.55	511.55	495.58	495.58	15.97
Total - A			511.55	511.55	495.58	495.58	15.97
2009-10	Water Resources Department	(i) Command Area Development (CAD)& Water Management (WM), Salia Irrigation Project	878.33	878.33	597.13	572.02	306.31
		(ii) CAD & WM in Pilla Salki Project	207.58	207.58	130.77	110.77	96.81
Total - B			1085.91	1085.91	727.9	682.79	403.12
2010-11	Director of Agriculture and Food production	(i) Construction of seed storage godowns in newly created DDAs	175.00	175.00	140.00	140.00	35.00
		(ii) Infrastructure Development of Agriculture Farm	537.73	537.73	407.68	407.68	130.05
		(iii) Estt. of 10 new soil testing labs	400.00	400.00	317.50	200.00	200.00
		(iv) Bio Fertiliser Application of sustainable crop production	266.30	266.30	119.18	111.43	154.87
	Co-operation Department	Replacement/Renovation of equipment and machineries of Baragarh Sugar Mills	565.00	565.00	315.03	315.03	249.97
	Director, Horticulture	Boosting of production of turmeric	56.67	56.67	13.43	13.43	43.24
	Director, Soil Conservation	Construction of 19 Halls-cum Resource Centre	362.00	362.00	279.96	230.50	131.50
	Water Resources Department	(i) CAD & WM Activities for Ghadabandha Irrigation project	364.56	364.56	76.67	76.67	287.89
		(ii) Extension. of distribution system of LIP	1275.18	1275.18	1121.26	1121.22	153.96
	OMFED	(i) Diary Development of Kalahandi	90.00	90.00	45.12	45.12	44.88
		(ii) Expansion of OMFED, Khurdha	75.00	75.00	50.55	50.55	24.45
		(iii) Estt. of New Diary Plant, Anugul	145.00	145.00	51.08	51.08	93.92
	Director, AH&VS	(i) Assisting Farmers Fodder Production	727.00	727.00	162.50	162.50	564.50
		(ii) Genetic Up-gradation of Cattle	1823.00	1823.00	842.96	980.54	842.46
		(iii) Improvement of Training	85.00	85.00	30.00	30.00	55.00
	Vice Chancellor, OUAT	(i) Infrastructure Development	1010.32	1010.32	914.23	336.12	674.20
		(ii) Research Projects	100.66	100.66	61.16	61.16	39.50
Total - C			8058.42	8058.42	4948.31	4333.03	3725.39
Grand total(A+B+C)		20 projects	9655.88	9655.88	6171.79	5511.40	4144.48

GoO : Government of Odisha

Appendix-6
(Refer paragraph 6.2.2 at page 35)
Statement showing the details of de-sanctioned RKVY Projects, non-utilisation of funds and loss of interest
(₹ in lakh)

Sl. No	Name of the Implementing Agency	Name of the project	Project cost	Year of sanction & date of release	Date of de-sanction	Date of realisation of IMAGE	Period of retention
1	Director, AH&VS, Cuttack	Improvement of the poultry farm	65.60	2009-10 dt.08.09.2010	08.12.2011	20.01.2012	17 months
2	Dean, Research BBSR	OUAT, Infrastructure Development (4)	11.52	2009-10 dt.19.10.2009	08.12.2011	20.12.2011	26 months
3	-do-	Research Projects (8)	53.30	2009-10 dt.19.10.2009	08.12.2011	20.12.2011	26 months
4	Director, AH&VS, Cuttack	Cold chain Management	50.00	2010-11 dt.08.09.2010	24.11.2011	20.01.2012	17 months
5	Director, Horticulture	Horticulture Mechanisation	255.00	2010-11 dt.08.09.2010	24.11.2011	02.01.2012	16 months
6	Secretary, OSAM Board	Market Yard at Ghaspit under RMC, Banki	97.00	2010-11 dt.21.06.2010	24.11.2011	03.01.2012	18 months
7	Dean Research, OUAT	Infrastructure Development (8)	25.58	2010-11 dt.18.06.2010	08.12.2011	20.12.2011	18 months
8	-do-	Research Project	24.33	2010-11 dt.18.06.2010	08.12.2011	20.12.2011	18 months
Total			582.33				

Appendix-7

(Refer paragraph 8.2 at page 42)

Statement showing details of unnecessary Supplementary Provision

(₹ in lakh)

Sl. No.	Year	Head of account	Budget provision	Supplementary provision	Surrender
1.	06-07	2401-District Administration	396.88	10.31	22.55
2.	06-07	2401-103 –Seeds	221.49	1.82	13.09
3.	06-07	2401-Manure & fertilizer	72.76	4.25	15.72
4.	06-07	2401-Agri. Engineering	92.15	2.85	10.33
5.	06-07	2401-800- Other experimental soil testing laboratories	262.74	21.86	26.56
Total			1046.02	41.09	88.25
6.	07-08	2435-Chemical fertilizer	87.00	9.42	9.55
7	07-08	2415-Research testing and training.	30.83	0.51	2.54
8	07-08	2401-Jute development	6.00	0.45	0.80
9	07-08	2401-Agriculture. implements	15.00	1.00	2.10
10	07-08	2401-Agriculture Implement Factory	8.40	0.25	0.72
Total			147.23	11.63	15.71
11	08-09	2401-Hqrs	263.76	2.68	4.77
12	08-09	2401-Range Administration.	1002.45	46.05	123.72
13	08-09	2401-IAP	36.29	7.26	8.81
14	08-09	2401-Experimental Seed farm	125.56	15.35	29.83
15	08-09	2401-Larg Farm	51.68	3.15	8.08
16	08-09	2401-Manure & Compost	34.80	6.96	10.33
17	08-09	2401-Cotton Development	57.33	7.54	15.67
18	08-09	2401-Sugarcane Development	29.71	2.86	6.38
19	08-09	2401-Demonstration and implementation Agriculture	56.16	1.04	4.60
20	08-09	2401-Statistical Section	35.66	1.21	2.84
Total			1693.40	94.10	215.03
21	09-10	2401- Range Administration		6.19	82.54
22	10-11	2401- District Administration	9581.23	116.87	207.65
23	10-11	2401-Seeds Experimental Seed farm	471.16	1.06	16.15
24	10-11	2401-800-Soil Testing	621.72	8.74	10.30
Total			10674.11	132.86	316.64
Grand total			13560.76	279.68	635.63

Appendix-8

(Refer paragraph 8.3 at page 43)

Statement showing DDO wise details of unauthorised expenditure in the form of “paid vouchers”*(₹ in lakh)*

Sl. No.	Name of the unit	Paid vouchers as on 31.3.11	Period to which the paid vouchers relates	Type of expenses
1	DDA, Bolangir	0.05	1.4.2009 to 31.3.2011	adjusted on 31.03.2011
2	Principal RITE, Bolangir	0.35	1.2.2011 to 31.3.2011	Contingencies
3	DAO, Berhampur	0.01	1.4.2010 to 31.3.2011	Contingencies
4	Soil Chemist, Cuttack	0.08	1.4.2010 to 31.3.2011	soil testing
5	DAO, Keonjhar	0.07	30-03-2010 to 31-03-2011	petty contingent charges
6	DAO, Champua	7.18	-do-	petty contingent charges
7	DAO, Ghatagaon	0.50	-do-	petty contingent charges
8	DAO, Jagatsinghpur	0.44	2006-07 to 2010-11	petty contingent charges
9	DDA, Puri	6.14	1993-94 to 2010-11	petty contingent charges
10	DAO, Titilagarh	1.22	NA	petty contingent charges
11	DAO, Karanjia	0.20	2010-11	petty contingent charges
12	JDA, Information, Bhubaneswar	0.03	NA	petty contingent charges
13	DDA, Cuttack	0.81	NA	office contingency
14	DAO, Anugul	0.24	NA	purchase of SPS, POL, electricity etc.
15	DAO, Bargarh	0.51	NA	office-contingency
16	EE, Agril. Berhampur	1.51	NA	office-contingency
17	EE, Agril. Sambalpur	4.81	NA	office-contingency
18	DAO, Rairangpur	0.50	2008-09 to 2010-11	petty contingent charges
19	DAO, Parlakhemundi	0.17	2009-10 to 10-11	petty contingent charges
20	DAO, Gunupur	1.27	1998-99 to 2010-11	oil seed, minikit, demonstration etc.
21	DAO, Athagarh	0.03	2010-11	petty contingent charges
22	Entomologist, Banki	0.02	2010-11	petty contingent charges
23	DAO, Bhawanipatna	0.18	2010-11	POL, telephone etc.
24	DAO, Dharamgarh	0.04	2007-08 to 2010-11	stationery and telephone
25	DAO, Koraput	0.23	2008-09 to 2010-11	POL, fax etc.
26	DAO, Kuchinda	0.11	2010-11	POL, electricity etc.
27	DAO, Sundargarh	0.11	2003-04 to 2010-11	court expenses and misc.
Total		26.81		

NA: Not available

Appendix-9

(Refer paragraph 8.3 at page 43)

Statement showing the details of Outstanding Advance as on 31 March 2011 lying with the test checked Drawing and Disbursing Officers of the Agriculture Department (Agriculture wing)

(₹ in crore)

Sl. No.	Name of the Unit	Total Outstanding advance	Outstanding advance more than one year	Outstanding advance against ex-employees	
				Number of ex-employees	Amount
1.	DDA, Puri	3.42	0.79	0	0.00
2.	DDA, Sambalpur	2.37	2.15	11	0.19
3.	DAO, Sambalpur	0.15	0	0	0.00
4.	DAO, Jharsuguda	0.04	0	0	0.00
5.	DAO, Udala	0.06	0.01	0	0.00
6.	DAO, Titilagarh	0.04	0.01	2	0.00
7.	DAO, Karanjia	0.03	0.02	0	0.00
8.	DAO, Jashipur	0.03	0	0	0.00
9.	State Bio Chemist, BBSR	0.01	0	0	0.00
10.	JDA Information, BBSR	0.08	0	1	0.00
11.	DA &FP (O), Odisha.	154.58	61.72	2	0.00
12.	Director, IMAGE, BBSR	0.28	0.19	0	0.00
13.	EE, Central Zone, BBSR	0.004	0	2	0.00
14.	DDA, Koraput	0.80	0.73	4	0.00
15.	DDA Bolangir	0.49	0.45	44	0.03
16.	PD, ATMA, Bolangir	2.50	2.34	0	0.00
17.	Principal, RITE, Bolangir	0.19	0	0	0.00
18.	DAO, Berhampur	0.23	0.04	28	0.01
19.	SMS Cotton. Berhampur	0.09	0.09	0	0.00
20.	DAO, Bhadrak	0.26	0.03	0	0.00
21.	DAO, Balasore	0.13	0.01	4	0.00
22.	Soil Chemist, Cuttack	0.11	0	0	0.00
23.	Dir. NFSM, Odisha , BBSR	0.006	0	0	0.00
24.	DDA, Cuttack	0.35	0.21	16	0.10
25.	DDA, Dhenkanal	0.11	0.10	0	0.00
26.	DAO, Baragarh	0.17	0.13	0	0.00
27.	DDA, Sundargarh	0.72	0.44	1	0.00
28.	Soil chemist, Sundargarh	0.02	0	0	0.00
29.	EE (Agril), Berhampur	0.88	0.73	0	0.00
30.	EE(Agril), Sambalpur	0.77	0.44	0	0.00
31.	DAO, Rairangpur	0.41	0.24	5	0.04
32.	DAO, Bangiriposhi	0.11	0	0	0.00

Sl. No.	Name of the Unit	Total Outstanding advance	Outstanding advance more than one year	Outstanding advance against ex-employees	
				Number of ex-employees	Amount
33.	DAO, Nayagarh	0.14	0.03	0	0.00
34.	DAO, Gajapati	0.41	0.17	0	0.00
35.	DAO, Gunupur	0.14	0.02	0	0.00
36.	DAO, Soro	0.02	0	0	0.00
37.	DAO, Athagarh	0.14	0.02	0	0.00
38.	Soil Chemist, Balasore	0.03	0.03	0	0.00
39.	Entomologist, Banki.	0.01	0	0	0.00
40.	DAO, Bhawanipatna	2.70	0.30	41	0.00
41.	DAO, Dharamgarh	5.83	0.35	7	0.4
42.	DAO, Koraput	0.22	0.09	13	0.03
43.	DAO, Jeypore	2.24	1.68	30	0.46
44.	DAO, Phulbani	0.14	0.09	8	0.04
45.	DAO, Kuchinda	0.05	0.03	0	0.00
46.	DAO, Sundargarh	0.33	0.16	18	0.00
47.	DAO, Kendrapada	0.19	0.19	0	0.00
48.	DAO, Keonjhar	0.04	0.01	0	0.00
49.	DAO, Champua	0.10	0	1	0.00
50.	DAO, Ghatagaon	0.01	0	0	0.00
51.	DAO, Jagatsinghpur	0.14	0.07	7	0.04
52.	DAO, Khariar.	0.98	0.23	10	0.00
Total		183.30	74.34	255	1.34

GLOSSARY

AAO	Assistant Agriculture Officer
AAP	Annual Action Plan
APICOL	Agricultural Promotion and Investment Corporation of Odisha Limited
BFAC	Block Farmers Advisory Committee
BTT	Block Technology Team
BW	Bore Well
CCO	Chief Controlling Officer
C-DAP	Comprehensive District Agriculture Plans
CSP	Centrally Sponsored Plan
DAOs	District Agriculture Officers
DDA	Deputy Directors of Agriculture
DDOs	Drawing and disbursing Officers
FIAC	Farm Information and Advisory Centre
GoI	Government of India
GWSI	Ground Water Survey and Investigation
IA	Implementing Agency
IMAGE	Institute on Management of Agriculture Extension
INM	Integrated Nutrition Management
IPM	Integrated Pest Management
ISOPOM	Integrated Scheme of Oilseeds, Pulses, Oil palm & Maize
JDA	Joint Directors of Agriculture
MMA	Macro Management of Agriculture
NABARD	National Bank for Agriculture and Rural Development
NAP	National Agriculture Policy
NFSM	National Food Security Mission
ORSAC	Odisha Remote Sensing Application Centre
OSAMB	Odisha State Agricultural Marketing Board
OSSC	Odisha State Seed Corporation

OUAT	Odisha University of Agriculture and Technology
P&C	Planning and Co-ordination
PLIPs	Private Lift Irrigation Projects
PRIs	Panchayati Raj Institutions
RIDF	Rural Infrastructure Development Fund
RKVY	Rashtriya Krishi Vikas Yojana
RL	River Lift
SAP	State Agriculture Policy
SL	Surface Lift
SLSC	State Level Sanctioning Committee
SP	State Plan
SREP	Strategic Research and Extension Plan
SRI	System of Rice Intensification
SRR	Seed Replacement Rate
SSTL	State Seed Testing Laboratories
STLs	Soil Testing Laboratories
STW	Shallow Tube wells
TSIs	Technical Support Institutions
VAW	Village Agriculture Workers