

THIRTEENTH KERALA LEGISLATIVE ASSEMBLY

**COMMITTEE
ON
PUBLIC ACCOUNTS
(2011-2014)**

TWENTY SIXTH REPORT
(Presented on 12th February, 2013)



SECRETARIAT OF THE KERALA LEGISLATURE
THIRUVANANTHAPURAM
2013

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On

**Paragraphs relating to Agriculture Department contained in the
Report of Comptroller and Auditor General of India for
the year ended 31st March, 2009 (Civil)**

CONTENTS

	<i>Page</i>
Composition of the Committee ..	v
Introduction ..	vii
Report ..	1-41
Appendices :	
I. Summary of Main Conclusion/Recommendation ..	42-49
II. Notes furnished by Government ..	50-63

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INTRODUCTION

I, the Chairman, Committee on Public Accounts, having been authorised by the Committee to present this Report, on their behalf present the Twenty Sixth Report on paragraphs relating to Agriculture Department contained in the Report of the Comptroller and Auditor General of India for the year ended 31st March, 2009 (Civil).

The Report of the Comptroller and Auditor General of India for the year ended 31st March, 2009 (Civil) was laid on the Table of the House on 25th March, 2010.

The Committee considered and finalised this Report at the meeting held on 7th February, 2013.

The Committee place on record their appreciation of the assistance rendered to them by the Accountant General in the examination of the Audit Report.

Thiruvananthapuram,
12th February, 2013.

DR. T. M. THOMAS ISAAC,
Chairman,
Committee on Public Accounts.

REPORT
AGRICULTURE DEPARTMENT

STATE HORTICULTURE MISSION

Highlights

The State Horticulture Mission was launched in 2005-06 to give new momentum to the development of horticulture, generate employment and enhance farm income. Out of the various interventions under the State Horticulture Mission, organic cultivation practised in Wayanad District showed significant improvement. Rural marketing facilities and infrastructure for seed production established by the Vegetable and Fruit Promotion Council, Keralam enabled farmers to sell their products directly to the customers and achieve substantial progress in production of vegetable seed. However, there were several deficiencies in implementation of various schemes under the Mission as indicated below:

The Perspective Plan for the entire Mission period (2005-12) was not prepared.

Annual Action Plans for 2005-06 to 2007-08 were prepared without basic data from district/field level agencies and resulting in unrealistic targets.

Out of ₹ 267.90 crore received from the Central and State Governments during 2005-09, ₹ 112.34 crore (42 per cent) remained unutilized with the State Horticulture Mission, the district missions and other implementing agencies.

Assistance of ₹ 12.02 lakh was released to four out of eight test-checked private sector nurseries despite the minimum stipulated area for the nurseries not being available with them. In the test-checked districts, the district Missions and the Agriculture Department did not ensure the quality of plants produced in the nurseries.

Audit scrutiny in four districts revealed that there was excess payment of assistance of ₹ 2.16 crore for ginger and turmeric crops and non-payment of assistance of ₹ 51.81 lakh for pepper crops under the area expansion programme.

The total area under cultivation of major crops, namely pineapple, pepper and ginger declined in 2007-08 as compared to 2004-05, despite expenditure of ₹ 10.93 crore during 2005-08 under the area expansion programme. The areas under banana and turmeric crops showed only a marginal increase.

The actual production of pepper decreased despite spending ₹ 34.46 crore under the scheme, 'Rejuvenation of pepper gardens' during 2005-08 as part of the State Horticulture Mission programme in Idukki and Wayanad districts.

Subsidy of ₹ 3.25 crore, earmarked for pack houses, mobile processing units and cold storages during 2005-09 was not utilised due to poor response arising out of low subsidy rates.

Introduction

The State Horticulture Mission (SHM) was launched in October 2005 for implementation of the National Horticulture Mission programme introduced by Government of India (GOI) during 2005-06. The schemes of the SHM envisaged overall development of the horticulture sector including areas of production, post-harvest management, processing and marketing of horticultural produce. Initially, the programme was implemented in 10 districts but it was subsequently extended to four* more districts.

Organisational Set-up

The SHM, registered under the Travancore-Cochin Literary, Scientific and Charitable Societies Registration Act 1955, started functioning from October 2005. The control, administration and management of the affairs of the SHM are vested in a Governing Body with the Minister for Agriculture as the Chairman and the Agriculture Production Commissioner as the Vice Chairman. A State Level Executive Committee (SLEC), constituted under the Chairmanship of the Agriculture Production Commissioner is responsible for project formulation and monitoring. The SHM is headed by a Director while the District Missions are headed by Deputy Directors of Agriculture (Horticulture). The programmes are mainly implemented by the State Agriculture Department through Krishi Bhavans. The Kerala Agriculture University (KAU), the Kerala State Horticultural Product Development Corporation Limited (Horticorp), the Vegetable and Fruit Promotion Council, Keralam (VFPCCK), etc., are also involved in the implementation of the SHM schemes.

Audit Objectives

The audit objectives were to examine whether:

- Annual Action Plans were prepared on the basis of accurate and reliable data and were approved in time;
- GOI and the State Government released funds as per the approved Annual Action Plans and the utilisation of funds was effective;

* Kollam and Kottayam from February 2009, Pathanamthitta from February 2008, Thiruvananthapuram from February 2007.

- the schemes were implemented in consonance with the guidelines of the Mission so that the targets were individually and collectively achieved;
- the scheme interventions resulted in improvement of the horticulture sectors covering production, post-harvest management, processing and marketing and
- adequate monitoring existed at various levels to ensure effective implementation of the schemes.

Audit Criteria

The following criteria were adopted for assessing the performance:

- Guidelines issued by the National and State Horticulture Missions ;
- Annual Action Plans approved by the National Horticulture Mission;
- Act, Rules, Orders and Instructions issued by the Central and State Governments and
- Financial and physical targets set by the SHM.

Scope of Audit and Audit Methodology

The performance audit, covering the activities of the SHM from 2005-06 to 2008-09, was conducted during March-June 2009. Audit scrutinised records of the Directorate of Agriculture, the head office of the SHM and four* out of 14 district offices selected by the random sampling method. In each of the selected districts, offices of two Assistant Directors of Agriculture and four Krishi Bhavans† 2 were also inspected. Besides, the head office and selected field units of KAU, the offices of HortiCorp, VFPCCK and model/small nurseries in the four districts were also inspected. Private nurseries were inspected in the presence of departmental officials. An entry meeting with the Secretary, Department of Agriculture was held on 12th May, 2009 and an exit meeting with the Agriculture Production Commissioner was held on 26th August, 2009.

* Ernakulam, Idukki, Thiruvananthapuram and Wayanad.

† The lowest field unit in the Agriculture Department.

Audit Findings

The deficiencies noticed in implementation of the schemes under the Mission are detailed below:

Non-preparation of the State Horticulture Mission Document

The main objective of the SHM was overall development of the horticulture sector in the State, keeping in view the regional disparities and climatic conditions. In order to formulate the said strategies and to give assistance to the programmes, a base line survey on the status of horticulture production and development potential was essential. Based on this survey, a Perspective Plan or the State Horticulture Mission Document indicating the strategies for achieving the SHM's objectives and schedules for executing various project activities for the entire SHM period (2005-2012), was to be prepared. This, in turn, would form the basis for preparation of Annual Action Plans (AAPs). However, this critical document was not prepared by SHM. In response, the Director, SHM stated (September 2009) that the Department of Agriculture had prepared the AAP for 2005-06 prior to formation of the SHM and got it approved by GOI. He also added that the details of any study or document relied on for formulation of Action Plans would be available with the Directorate of Agriculture. However, audit scrutiny revealed that details of baseline surveys were not available with the Directorate of Agriculture. Therefore, the AAPs for 2005-06 to 2008-09 were prepared on an *ad hoc* basis without any Perspective Plan, which adversely affected the implementation of the programmes.

Deficiencies in preparation of Annual Action Plans

According to NHM guidelines, the District Missions were to prepare the AAPs based on their priorities and potential to execute programmes and the SHM was to prepare a consolidated AAP covering the whole State. Audit scrutiny revealed that AAPs for the first three years of implementation (2005-08) were prepared without involvement of district Missions and field level implementing units. Consequently, targets were fixed for the implementing units without assessing field level requirements and feasibility. This resulted in poor progress in the execution of projects.

Audit also found that only 50 per cent of the total funds allotted were released to the district Missions/implementing agencies, despite involving district Missions in the preparation of AAPs for 2008-09, which indicated that fixing of district level targets were unrealistic.

The guidelines stipulated formation of a Technical Support Group (TSG) consisting of experts and technical personnel to advise and evaluate project proposals, monitor the planning and implement the programmes. However, the TSG was not constituted as of June 2009 and allocation of Rupees two crore in 2005-06 and ₹ 0.50 crore in 2008-09 for this purpose remained unutilised. The Director, SHM stated (September 2009) that action would be taken to constitute a TSG at the earliest.

FINANCIAL MANAGEMENT

Low utilization of GOI funds

The National Horticulture Mission (NHM) programme was launched as a cent per cent Centrally Sponsored Scheme during the Tenth Plan period (2002-07). However, during the Eleventh Plan period (2007-12), the pattern of financial assistance between the Central and State Governments was revised to 85:15. The Central assistance as per the approved AAP was allotted based on the expenditure during the previous year and the capacity of the SHM in implementing the programme and the same was released directly to the SHM through demand drafts/cheques. The SHM, in turn, released assistance to all the implementing units as grants or subsidies depending on the programmes entrusted to them. The details of receipt and utilization of funds by the SHM for the period 2005-09 were as follows:

TABLE 1.1—DETAILS OF RECEIPT AND UTILIZATION OF FUNDS
(Rupees in crore)

Year	Amount as per Approved Action Plan	Share due from		Amount received from		Total receipt	Amount released by SHM	Unutilised balance with SHM	
		GOI	State Govt. (15%)	GOI	State Govt.			Amount	Percent -age
2005-06	75.83	75.83	Nil(*)	35.34	Nil	35.34	3.85	31.49	89
2006-07	193.73	193.73	Nil(*)	79.64	Nil	79.64	69.03	10.61	13
2007-08	192.13	163.31	28.82	61.48	3.00	64.48	63.84	0.64	1
2008-09	174.20	148.07	26.13	75.17	13.27†	88.44	44.00	44.44	50
Total	635.89	580.94	54.95	251.63	16.27	267.90	180.72	87.18	33

Source: Records of State Horticulture Mission

It was observed that

- Against the total approved outlay of ₹ 635.89 crore for SHM during 2005-09, the amount received was only ₹ 267.90 crore. This resulted in shortfall (58 per cent) in release of ₹ 367.99 crore (Central Share ₹ 329.31 crore and State share ₹ 38.68 crore). Failure of the SHM to

* The scheme was eligible for cent per cent assistance from GOI during 2005-2006 and 2006-2007.

† ₹ 11.27 crore released by State Government on 31st March, 2009.

utilise the original allotment resulted in non-release of balances of approved outlays by GOI in the subsequent years, which would reduce the spending in the horticulture sector.

- Out of ₹ 267.90 crore received by the SHM during 2005-09, only ₹ 180.72 crore was released to the district Missions and other implementing units and the balance of ₹ 87.18 crore remained unutilised with the SHM as of March 2009. However, district Missions and the implementing units could spend only ₹ 154.56 crore and the balance of ₹ 25.16 crore remained unutilised in bank accounts. Thus the total unspent amount was ₹ 112.34 crore (42 per cent) as of March 2009. GOI directed (April 2009) the SHM to send proposals for revalidation of unutilized funds, but no proposals had been forwarded so far (October 2009).
- During 2007-2009, the State Government released ₹ 16.27 crore as a matching grant to the Central release of ₹ 136.65 crore, against the requirement of ₹ 24.12 crore. The Director, SHM stated (September 2009) that the release of the balance amount of ₹ 7.85 crore was under correspondence with the State Government.
- The interest accrued up to March 2009 on SHM funds deposited in banks in the 12 district Missions and in the SHM headquarters amounted to ₹ 11.15 crore. GOI clarified in August 2009 that the interest portion would be adjusted in the subsequent release of grants.

Finalisation of annual accounts

The SHM was required to furnish audited accounts and utilization certificates to GOI immediately after the close of each financial year. As of August 2009, the annual accounts for the year 2005-2006 had been finalised. The Director, SHM stated (September 2009) that the annual accounts up to 2007-2008 had been finalized and approved by the Executive Committee of the SHM and the accounts for 2008-2009 would be completed by December 2009. However, Audit found that the annual accounts for 2006-2007 and 2007-2008 had not been approved as of September 2009 by the Governing Body as stipulated in clause 9.7(a) of the Memorandum of Association of the SHM.

Implementation of Schemes

The main objective of the SHM was to provide holistic growth through the implementation of schemes like vegetable seed production, establishment of new nurseries, establishment of new garden, rejuvenation/replacement of senile pepper plantation, organic farming, post-harvest management activities, etc. The crops

assisted by the SHM included perennial crops* and nonperennial crops†. The crops cultivated in the State differed from region to region and hence were grouped in three clusters‡ for the implementation of the programmes. Audit scrutiny was confined to major crops cultivated in the State viz., banana, ginger, pepper, pineapple, turmeric and vegetable seeds.

Seed infrastructure

To enhance the quality of vegetable seed production and to facilitate proper handling, storage and packaging of seeds, the NHM guidelines envisaged project-based assistance§ for creating infrastructure like drying platforms, storage bins, packaging units and related equipment. The SHM sanctioned ₹ 1.25 crore each to KAU and VFPCCK for establishing vegetable seed infrastructure and released ₹ 90 lakh and ₹ 75 lakh respectively to them till March 2009.

It was found that

- The vegetable seed production of the VFPCCK unit increased from 13 MT in 2005-06 to 48 MT in 2008-09 and the seeds produced were sold throughs Krishi Bhavans whereas in KAU (College of Agriculture, Vellayani, Thiruvananthapuram) seed production had not yet started (April 2009) due to non-creation of infrastructural facilities.
- Rule 3 of the Seeds (Control) Order, 1983 stipulated mandatory licences for trading in seeds. However, KAU had not yet (June 2009) applied for a licence, whereas the licence issued to VFPCCK had expired in July 2008. However, KAU and VFPCCK did not make efforts to get the exemption from the State Government as per sub-rule (2) of Rule 3 of the Seeds (Control) Order, 1983.

Establishment of nurseries

Production and distribution of good quality seeds and planting materials are the primary requirements for area expansion and rehabilitation programmes. In order to achieve the above objectives, the SHM provided assistance in the form of subsidies for establishment of two types of nurseries viz. model nurseries with

* Cashew, Mango, Pepper.

† Banana, Ginger, Pineapple, Turmeric, etc.

‡ Cluster I—Banana, Cashew, Mango, Pappaya and Pineapple; Cluster II—Spices (Ginger, Nutmeg, Pepper, Turmeric); Cluster III—Flowers.

§ Cent per cent of the estimated cost for Public Sector Units and 25 per cent for private sector units in the form of credit linked back ended subsidy.

minimum area of four hectares and small nurseries with minimum area of one hectare. These nurseries were eligible for subsidy at 100 per cent and 50 per cent of the estimated cost (model nursery- ₹ 18 lakh, small nursery- ₹ 3 lakh) for the public sector and the private sector respectively. A Memorandum of Understanding (MoU) was to be executed between the selected beneficiary and the district Mission for completing the work within the stipulated time and to supply the required quantity and quality of planting materials as per the demand. During 2005-06 to 2008-09, the SHM approved the establishment of 55 model nurseries and 410 small nurseries with a total estimated cost of ₹ 14.81 crore. Out of this, 25 model nurseries and 153 small nurseries were established (March 2009) and ₹ 4.58 crore was released as subsidy to these nurseries.

Test check by Audit in four (out of 10) model nurseries and 13 (out of 67) small nurseries in the selected four districts revealed the following:

- MoUs between the nurseries and the district Missions were not executed as required in the guidelines. Thus the obligations of the nurseries were not enforced effectively by the respective district Missions. The Director, SHM stated (September 2009) that strict directions had been issued to execute MoUs in future.
- Assistance of ₹ 12.02 lakh was released to four out of eight private nurseries which did not have the stipulated minimum area.
- Nurseries are required to produce and distribute quality planting materials continuously over a period of time. However, nurseries established for the crops like banana, ginger and turmeric were established for only one year either due to non-practising of continuous cultivation in the same land or leased land* cultivation. Hence, the subsidy of ₹ 1.09 crore paid to such nurseries could not provide quality planting materials continuously over a period of time and the intended results were not achieved.
- During 2005-06, one model nursery for pepper in the private sector was sanctioned in Wayanad district with a maximum assistance of Rupees nine lakh. However, assistance of ₹ 7.24 lakh was paid to three nurseries established in three pieces of land with an area of 1.3 Ha. each, considering these as a single model nursery, even though the nurseries did not have a contiguous area of four hectares as required. Each of these three nurseries should have been considered as a small nursery and assistance of ₹ 4.50 lakh (at ₹ 1.50 lakh per nursery) only should have been paid. The excess assistance thus paid amounted to ₹ 2.74 lakh.

* Cultivation in land taken on lease generally for one year.

- In February 2006, the SHM sanctioned the establishment of a model floriculture nursery in the Cardamom Research Station of KAU at Pampadumpara, Idukki district and released ₹ 18 lakh (March and November 2006). As per the NHM guidelines, model nurseries were required to produce at least four lakh plants per annum. However, the nursery produced only 5240 plants during 2007-08 though it was set up in March 2007. It was seen in audit that a nursery set up earlier in the said station sold 4258 plants annually on an average during 2004-05 to 2006-07. Thus there was no visible increase in production by establishing this model nursery and the ₹ 18 lakh released was largely unproductive. KAU stated (August 2009) that there was a shortage of skilled labourers for budding and necessary steps were under way to increase production.
- During 2006-07, small nurseries in pepper and ginger were sanctioned to the State Vegetable Farm, Vandiperiyar and the District Agriculture Farm, Areekuzha respectively. These nurseries existed for only one year and could not achieve the production targets. Despite this, model nurseries of the same crops were sanctioned to these departmental farms in the following year (2007-08). Sanctioning of model nurseries where even small nurseries could not achieve these targets showed poor commitment of the SHM towards achieving its objectives.
- In the test-checked districts, the district Missions and the Agriculture Department had no system to check the quality of plants produced in the nurseries before distributing the same to the SHM farmers of the district. The Director, SHM responded (September 2009) that a district level committee to check the quality of plants produced in the nurseries was there in each district but some of them were not functioning properly. He also added that proper functioning of the committees would be ensured.
- To ensure the quality of the products of the nurseries, the Ministry of Agriculture, GOI directed (August 2006) the State to enact legislation for nursery registration and certification. The Director of Agriculture replied (July 2009) that no legislation for nursery registration and certification of quality planting materials (excluding seeds) had been enacted by the Government of Kerala so far.

Tissue culture in pineapple

Projects for the rehabilitation of a Tissue Culture (TC) Laboratory and establishment of a small nursery for production of pineapple suckers (using TC plantlets) by the Pineapple Research Station, Vazhakulam, Ernakulam district under KAU were approved by the SHM and MoUs for the laboratory and nursery were executed in February 2006 and March 2007 respectively. Subsidy of ₹ 11 lakh (Rupees eight lakh for the TC laboratory and Rupees three lakh for the nursery) was released to KAU in February 2006 and March 2007. The rehabilitation work of the laboratory was completed in March 2006 and the nursery was established in March 2008. The capacity of the laboratory was 60000 plantlets* per annum and these were to be hardened in the nursery. The capacity of the nursery was one lakh plantlets per annum. This created an idle capacity of 40000 plantlets per annum in the nursery.

It was also seen that the SHM had approved another small nursery project by the Nadukkara Agro Processing Centre Limited (NAPCL), Muvattupuzha, Ernakulam, to produce 50000 suckers† using plantlets from the TC laboratory of KAU and signed a MoU with them in February 2006. Subsidy of Rupees three lakh was also released in February 2006. As the existing capacity of the TC laboratory was insufficient to meet the requirement of its own nursery, the laboratory was not able to supply the required plantlets to NAPCL. NAPCL received only 2500 plantlets and had not produced any fully grown suckers till May 2009.

Thus sanctioning of two nurseries for production and hardening of TC pineapple suckers without linking to the actual capacity of the TC laboratory resulted in creation of unproductive facilities. Subsidy of Rupees six lakh released to the nurseries did not serve the intended purpose.

Establishment of new gardens

One of the major objectives of the SHM was to expand areas under cultivation through establishment of new gardens to enhance production and productivity of horticulture crops. The programme 'Establishment of New Gardens' envisaged assistance for bringing new areas under perennial fruit crops (gooseberry, mango), non-perennial fruit crops (banana, pineapple), spices (ginger, pepper, turmeric), and plantation crops (arecanut, cashew, cocoa). The quantum of assistance was on the basis of the estimated cost of cultivation per Ha. and fixed as 75 per cent of the cost for perennial fruits, spices and plantation crops and 50 per cent

* Plantlets are tiny plants developed through Tissue Culture for gardening and planting.

† Pineapple planting material.

for non-perennial fruits. The assistance was ₹ 15,000 and ₹ 11,250 per Ha. for non-perennial and spices respectively. Assistance under the scheme was to be paid in three years in the ratio of 50:20:30. During 2005-09 ₹ 36.10 crore was released as assistance for bringing an additional area of 53,108 Ha. under cultivation of major crops, namely banana, ginger, pepper, pineapple and turmeric.

Audit scrutiny revealed that:

- Though the area expansion programme intended to ensure sustainable increase in cultivation of horticulture crops, the same was not achieved in the case of crops like banana, ginger and turmeric due to leased land cultivation and the practice of not continuing cultivation in the same land for more than one year. Hence, continued cultivation of these crops in the same land for three years as envisaged in the guidelines was not achieved.
- Pineapple is a commercial crop cultivated as a single crop as well as an intercrop during the initial periods (first four years) of rubber plantation. Most of the cultivation is on leased land. Though the cultivation continued for three years, assistance was not fully paid as stipulated in the guidelines. According to the scheme, assistance for the second year was subject to 75 per cent survival of new plants and for the third year, it was subject to 90 per cent survival of the plants assisted in the second year. Test check in selected districts revealed that only 44 per cent of plants were assisted in the second year and 30 per cent of plants were assisted in the third year. Though the assistance was to be paid in three years, SHM did not fix any financial target for the districts for continuing the cultivation in the second and third years. The Director, SHM stated (September 2009) that this was due to non-receipt of proposals from the district Mission. This reply is not acceptable since the SHM was responsible for including the second and third year targets based on the first year target.
- Ginger and turmeric were not cultivated in the same land continuously due to low fertility of land after the first year of cultivation. However, the entire assistance of ₹ 11,250 per Ha. was released in the first year itself though only ₹ 5,625 (50 per cent assistance) was payable in the first year for these crops. This resulted in excess payment of assistance of ₹ 2.16 crore on 3964 Ha. of land brought under cultivation in the four districts test-checked. In the case of pepper, however, where continuous cultivation was practiced, the first year assistance of ₹ 5,625 per Ha. alone was paid to farmers in the four districts test checked. This resulted in non-payment of second and third year assistance of ₹ 51.81 lakh on 940 Ha. of land brought additionally under cultivation.

Impact of the scheme

The areas under cultivation of major crops assisted by SHM in the selected districts prior to the commencement of the scheme (2004-05) and in 2007-08 were as follows:

TABLE 1.2: AREAS UNDER CULTIVATION IN THE FOUR TEST-CHECKED DISTRICTS

Name of the crop	Area under cultivation (in hectares)									
	Ernakulam		Idukki		Thiruvananthapuram		Wayanad		Total	
	2004-05	2007-08	2004-05	2007-08	2004-05	2007-08	2004-05	2007-08	2004-05	2007-08
Banana	6107	6115	1748	2559	2492	2078	12278	12123	22625	22875
Pineapple	7439	6978	1600	1083	305	319	54	55	9398	8438
Ginger	295	337	876	934	103	94	5731	4604	7005	5969
Pepper	6825	6106	82316	65333	7320	5557	41573	25542	138034	102538
Turmeric	484	368	281	287	59	53	139	270	963	978

Source: Records of the Directorate of Agriculture.

The area under cultivation of banana increased by 46 per cent in Idukki. The area remained static in Ernakulam and Wayanad but declined in Thiruvananthapuram by 17 per cent. Also the cultivated area of turmeric in Wayanad district increased (51 per cent) from 139 Ha. in 2004-05 to 270 Ha. in 2007-08. A declining trend was noticed in respect of all other selected crops and the major decline noticed was for pepper where the shortfall ranged between 11 per cent (Ernakulam) to 39 per cent (Wayanad). The overall declining trend in cultivation indicated the ineffectiveness of the schemes in achieving sustainable development in cultivation of horticulture crops.

The total cropped area of the State in 2001-02 was 29.92 lakh Ha. which increased to 29.96 lakh Ha. in 2004-05. Nearly, 57 per cent of the cropped area was under paddy, coconut and rubber. The area under the major crops* assisted by the SHM in 2001-02 was 2.82 lakh Ha. which increased to 3.28 lakh Ha. in 2005-06 but declined thereafter to 2.58 lakh Ha. in 2007-08. Cultivation details of major crops prior to implementation of the programme and after three years of intervention by the SHM in respect of selected crops for which substantial expenditure (₹ 33.61 crore) was incurred, were detailed in the following table:

* Banana, Ginger, Pepper, Pineapple and Turmeric.

Table 1.3: AREA, PRODUCTION AND PRODUCTIVITY OF SELECTED CROPS IN THE STATE

Name of the crop	Status in 2004-05			Targets and achievements of SHM scheme			Status in 2007-08		
	Area (Ha.)	Production (MT)	Productivity (Kg/Ha.)	Physical Target	Achievement		Area (Ha.)	Production (MT)	Productivity (Kg/Ha.)
					Physical	Financial (lakh)			
Banana	58866	475371	8075	40281	33262	2255.60	59341	439803	7411
Pineapple	12680	101912	8037	8979	6915.6	422.17	11262	82782	7350
Ginger	9991	45305	4534	4945	4469.4	482.17	8865	31726	3578
Pepper	237669	74980	315	9740	1462	79.58	175679	41952	239
Turmeric	2881	6244	2167	1547	1162.7	121.24	3155	7434	2356

Source: Records of Directorate of Agriculture and SHM

The areas under cultivation declined considerably in respect of pineapple, ginger and pepper, even though substantial assistance of ₹ 4.53 crore, ₹ 1.02 crore and ₹ 5.38 crore respectively (total: ₹ 10.93 crore) was provided for these crops under the area expansion programme till 2007-08. There was only a marginal increase of the area under banana (0.8 per cent) and turmeric (9.5 per cent) crops. The decline in the productivity of the test-checked crops (except turmeric) indicated that the programme could not achieve its major objective of enhancing production and productivity of important horticulture crops in the State.

Rejuvenation/Replacement of senile plantations

Pepper is one of the most important export crops in Kerala. In 2004-05, the average yield of pepper was 315 kg per Ha against the potential of 1000 kg per Ha. The low productivity was due to preponderance of old and senile trees and poor management of inputs such as water, nutrients and pesticides including disease-affected pepper vines. The NHM envisaged 'Rejuvenation/Replacement of Senile Plantation' programme with the objective of rejuvenating pepper gardens by removing senile or diseased plants, by filling gaps, by putting new standards* and by adopting scientific management practices to enhance productivity to 1000 kg per Ha. Financial assistance of ₹ 15,000 was available under the scheme, being 50 per cent of the cost of rejuvenation which was assessed as ₹ 30,000. During 2005-06 to 2008-09, ₹ 37.31 crore was disbursed as assistance in the two selected pepper cultivated districts of Idukki and Wayanad. The targets and achievements under the programme in the selected pepper cultivated districts and for the whole State are detailed in the following table:

* Support trees for pepper vines.

TABLE 1.4: TARGETS AND ACHIEVEMENTS FOR REJUVENATION OF PEPPER

Year	<i>Physical Target</i>			<i>Physical achievement</i>			<i>Finanical Target</i>			<i>Finanical achievement</i>		
	<i>State</i>	<i>Selected Districts</i>		<i>State</i>	<i>Selected Districts</i>		<i>State</i>	<i>Selected Districts</i>		<i>State</i>	<i>Selected Districts</i>	
		Wayanad	Idukki		Wayanad	Idukki		Wayanad	Idukki		Wayanad	Idukki
	<i>(in hectare)</i>						<i>(Rupees in crore)</i>					
2005-06	5000	2000	2000	5000	2000	2000	7.50	3.00	3.00	4.86	1.08	3.00
2006-07	10000	3000	3700	8395	3000	3930	15.00	4.50	5.55	11.66	4.49	5.90
2007-08	20000	5000	8375	16496	4985	8375	30.00	7.50	12.56	22.79	7.43	12.56
2008-09	30655	12000	13000	3098	Nil	1899	45.98	18.00	19.50	3.35	Nil	2.85
Total	65655	22000	27075	32989	9985	16204	98.48	33.00	40.61	42.66	13.00	24.31

Source: District-wise progress report of SHM.

It was seen in audit that the production and productivity of pepper decreased during 2007-08 compared to 2004-05 despite spending ₹ 34.46 crore during the period 2005-08 for implementing rejuvenation programme by the SHM. The details of production and productivity were as under:

TABLE 1.5: PRODUCTION AND PRODUCTIVITY OF PEPPER

Name of the district	2004-05 before SHM		2007-08	
	Production (MT)	Productivity (Kg/Ha)	Production (MT)	Productivity (Kg/Ha)
Idukki	38787	471	23311	356
Wayanad	13897	334	4060	158

Source: Records of Agriculture Department.

The deficiencies in implementation of the scheme noticed by Audit were:

- Field level studies regarding senile plantations, suitability of land, number of disease-affected plants, etc., were not conducted to assess the extent of rejuvenation/replacement and the inputs required.
- In Idukki and Wayanad districts, the target fixed were about 32 per cent and 61 per cent of the total cropped area respectively. However, assistance was distributed amongst all the farmers without assessing the extent of rejuvenation/replacement required, which resulted in unproductive use of the funds.
- The pattern of assistance to the farmers was in the form of cash and kind (permits for drawing inputs from authorised depots) till December 2007. However, from January 2008 full subsidy was to be paid in cash. The Director, SHM stated (September 2009) that the farmers were given the liberty to purchase inputs from agencies of their choice as the assistance under the scheme was not attractive, the formalities involved in procuring these inputs through permit system were cumbersome and on the assumption that a genuine farmer would apply good quality inputs for the benefit of his crop.
- In Idukki, the majority of the farmers had no land records of their holdings and the Krishi Bhavan could not verify the authenticity of the land records furnished by the farmers. The allotted assistance for disease control was divided amongst the farmers for rejuvenation in areas ranging from 0.1 Ha to 0.4 Ha. Providing assistance to small land holdings for disease control did not result in rejuvenation and increased productivity of the land.

- During 2005-09, targets fixed for two Krishi Bhavans at Vazhathopu and Kamakshy in Idukki district for pepper rejuvenation were 1,400 Ha and 1500 Ha respectively against the actual area under pepper cultivation of 1350 Ha and 1200 Ha respectively. The targeted area for rejuvenation was higher than the actual area of pepper cultivation. This indicated that the targets fixed were not realistic and without verification of facts.

Organic farming

Organic farming aims at production of agricultural produce with no chemical residues. This cultivation requires two to three years to achieve organic status. Organic farming should exclusively be promoted on an area-based- approach instead of a crop-specific approach. Groups of 20-25 farmers possessing contiguous areas of 25-50 Ha were to be selected for execution of organic farming. The programme envisaged financial assistance of ₹ 10,000 per Ha for the first two to three years. GOI subsequently revised (May 2008) the minimum land requirement and the period of assistance to 50 Ha and three years respectively. During 2005-09, financial assistance of ₹ 2.44 crore was disbursed to farmers for cultivation of crops using the organic farming method in an area of 2419 Ha in three test-checked districts* (except Wayanad district).

It was observed in audit that the targets allotted to the Krishi Bhavans in the three test-checked districts (except in Wayanad) were divided among the beneficiaries having land ranging from 0.06 Ha to 1 Ha. This implied that the minimum area specified in the guidelines was not adhered to during selection of beneficiaries. The Director, SHM replied (June 2009) that the land pattern was typically fragmented in nature and the average size of land holdings was 20 cents (0.08 Ha). Consequently, the guidelines on organic farming could not be effectively adhered to. This was mainly due to the failure of the SHM to identify clusters of contiguous areas suitable for organic farming at the time of preparation of the Action Plan.

However, it was found in audit that area-based organic farming as per NHM norms was successfully practised with the help of two societies working in the field of promoting organic farming in two Block Panchayats† test-checked in Wayanad district.

Organic farming for pineapple was entrusted to the Nadukkara Agro Processing Centre Limited (NAPCL), Ernakulam in 100 Ha of land covering 21 panchayats and 40 farmers. The SHM released ₹ 17.50 lakh as the first instalment for the purpose. The project was discontinued after cultivation in 43.44 Ha after incurring an expenditure of ₹ 9.74 lakh. The balance of ₹ 7.76 lakh remained unutilized with NAPCL (May 2009) as contiguous areas (25-50 Ha) had not been selected for implementing the farming. Thus the project remained unproductive. The Director, SHM stated (September 2009) that action had been taken to get back the unutilised amount of ₹ 7.76 lakh from NAPCL.

* Ernakulam, Idukki and Thiruvananthapuram.

† Mananthavady and Sulthan Bathery.

Establishment of bio-control laboratories

Bio-control laboratories produce micro-organisms recognized as bio-control agents*, which control pests and diseases of plants. SHM sanctioned ₹ 4.11 crore during 2006-09 for establishment of eight bio-control laboratories (six in the public sector and two in the private sector) and released ₹ 1.72 crore as of April 2009 as indicated in the following table:

TABLE 1.6: FINANCIAL ASSISTANCE TO BIO-CONTROL LABORATORIES

Sl.No.	Name of implementing agency	Year of sanction	SHM	Amount	Month	Status
			assis- tance†	released	of release	
			(Rupees in lakh)			
1.	Indian Cardamom Research Institute, Pampadumpara, Idukki	2007-08	64.75	44.75	April 2008	Ongoing
2.	Agro Bio-tech Research Centre Limited, Kottayam	2008-09	24.62	Nil	..	Ongoing
3.	POABS Biotech, Nelliampathy, Palakkad	2008-09	40.00	25.00	April 2009	Ongoing
4.	CARD Krishi Vigyan Kendra, Pathanamthitta	2008-09	40.00	Nil	..	Not started
5.	Banana Research Station, Kannara, Thrissur	2008-09	31.39	28.99	January 2009	Ongoing
6.	KAU, Thrissur	2008-09	50.00	30.00	-do-	Ongoing
7.	College of Agriculture, Vellayani, Thiruvananthapuram	2006-07	80.00	43.60	January 2008	Ongoing
8.	Regional Agriculture Research Station, Ambalavayal, Wayanad	2008-09	80.00	Nil	..	Not started
Total			410.76	172.34		

Source: Records of SHM

* Pseudomonas and Trichoderma.

† Project based-Maximum ₹ 30 lakh for public sector/Government and ₹ 40 lakh for Private sector.

Audit found that:

- The SHM had not conducted any study to assess the annual requirement of bio-control agents for use in the horticulture sector before releasing funds to set up the above-stated laboratories in the State.
- Construction of a laboratory at the College of Agriculture, Vellayani, Thiruvananthapuram did not start as of May 2009, mainly due to delay in getting permission from the Grama Panchayat for construction of the building. Construction of a building in the Indian Cardamom Research Institute, Pampadumpara, Idukki, started in January 2008, was still to be completed (June 2009). Thus, ₹ 88.35 lakh released for establishment of these two laboratories remained unproductive so far.
- A bio-control laboratory in Thrissur district under the Department of Agriculture and another one in the Krishi Vigyan Kendra of KAU in Wayanad district were established before the commencement of the SHM project. The laboratory at Thrissur had an annual production capacity of 200 MT Trichoderma* and 150 MT of Pseudomonas† and the laboratory at Wayanad had 10 MT each of Trichoderma and Pseudomonas. These laboratories could not use their full production capacity due to less demand from the Department of Agriculture for the schemes implemented by it. Hence, the decision to sanction one more laboratory at the Regional Agriculture Research Station, Ambalavayal, Wayanad was unjustified. The Director, SHM stated (September 2009) that instructions had been issued to all Principal Agricultural Officers to direct farmers to buy the bio-control agents from the SHM-assisted laboratories.

Distribution of subsidy

Krishi Bhavans are the field level implementing units of SHM schemes which collect subsidy claims from the beneficiaries and forward them to the district Missions. The district Missions place the claims before the District Level Committees (DLC) headed by the District Collectors and the DLCs pass the claims for payment according to the merit of each case. Cheques for more than Rupees one lakh are signed by the District Collectors for payment and the release of funds depends on the convening of the DLCs. It was seen that only one to eight meetings in 2007-08 and two to seven meetings in 2008-09 of the DLCs were held in the test-checked districts, which delayed the distribution of the subsidy despite having sufficient funds. Delays ranging from three to 12 months in

* Used to control foot rat disease in pepper

† Pesticide and growth stimulator

disbursement of subsidy were noticed in 78 out of the 334 claims test-checked in 12 Krishi Bhavans in the selected districts. This was mainly due to non-convening of DLC meetings regularly, despite the decision (January 2008) to have meetings once in a month. The Director, SHM stated (September 2009) that the financial powers to pass claims up to ₹ 10 lakh had since been delegated to the Principal Agricultural Officers and Deputy Directors of Agriculture (Horticulture) and hence, there were no delays in disbursement of funds to the beneficiaries.

The method of disbursement of claims was not common in all the districts test-checked. In Wayanad district, a zero balance account in bank was opened against all beneficiaries and the claims were transferred to their account from the district Mission itself. In other districts, the officers of the Block/Krishi Bhavans distributed the subsidy in cash. The system followed in Wayanad District enabled speedy settlement of claims when compared to the method of cash disbursement followed in other districts.

Marketing infrastructure

The marketing programmes under the SHM include strengthening of existing markets and investment from the private and co-operative sector in the development of market infrastructure. The targets in the AAPs for establishment of marketing facilities and achievements during 2005-06 to 2008-09 were as follows:

Table 1.7: TARGETS AND ACHIEVEMENTS OF MARKETING FACILITIES ESTABLISHED

<i>Name of the scheme</i>	<i>Physical target</i>	<i>Financial target (₹ in lakh)</i>	<i>Physical achievement</i>	<i>Financial achievement (₹ in lakh)</i>
Rural Market	156	612.50	22	22.00
Rural Market (Hill area)	18	82.50	1	4.08
Sorting and Grading Unit	8	29.58	6	2.28
Wholesale market	10	500.00	Nil	Nil

Source: Records of SHM

The Vegetable and Fruit Promotion Council, Keralam (VFPCCK) is an organization helping the farmers to increase income from commercial cultivation of crops. The SHM sanctioned an assistance of ₹ 84.90 lakh (25 per cent of the cost) for the establishment of 22 rural markets by VFPCCK and the first instalment

of ₹ 22 lakh was released in August 2007. VFPCCK completed construction of permanent buildings for seven markets and essential facilities were provided. Construction of buildings in the remaining places was not completed due to non-release of the second and third instalments of funds by the SHM.

Audit scrutiny revealed the following:

- Marketing facilities to support farmers were available wherever VFPCCK was found to be active, whereas in other locations, similar marketing facilities were not established under the SHM scheme to support the local farmers involved in SHM programmes.
- Out of the 12 Krishi Bhavans test-checked, eight had no marketing facilities to support farmers within their jurisdiction.
- Manjallur and Kottapady panchayats in Ernakulam district resolved and communicated their decision through the Principal Agricultural Officer, Ernakulam to undertake the project for development of agricultural rural markets under the SHM in July 2007 and September 2007 respectively. But no assistance was sanctioned as of March 2009. The Director, SHM stated (September 2009) that no project proposals had been submitted by the panchayats. The reply does not explain why the SHM did not take action to obtain the project proposals from the panchayats.
- The SHM had not utilised the services of HortiCorp which functions with the objective of assisting farmers through an integrated system of production, procurement, storage, marketing and exporting of horticultural products, in the marketing of produce of SHM farmers.

Post-harvest management

Post-harvest management includes packing, grading, transportation, curing, ripening and cold storage. These facilities are essential for increasing the marketability of agriculture products adding value to the produce, increasing profitability and reducing losses. The SHM provides subsidy of 25 per cent of the estimated cost for post-harvest management activities. It was seen in audit that subsidy of ₹ 3.25 crore earmarked during 2005-06 to 2008-09 for pack houses, mobile processing units and cold storages was not utilised. The Director, SHM replied that the funds could not be utilized due to poor response arising from low subsidy rates, reluctance of panchayat authorities to take up projects, etc. However, ₹ 10 crore was given to the Perishable Cargo Unit established (March 2009) under the Cochin International Airport Authority Limited (CIAL) for facilitating export of vegetables and fruits. In the absence of pack houses and sorting and grading

units in the nearby areas of CIAL to support farmers to keep their produce fresh, the facility established in CIAL was unable to support the SHM farmers in the State. This indicated that allocation was made in the AAP without assessing the field level situation, resulting in lack of support mechanism to add value to the farmers' produce.

Monitoring and Evaluation

The State Level Executive Committee (SLEC) and the District Level Committees were to review and monitor the implementation of the programmes at the State and District level. The Technical Support Group (TSG) of the Mission was to carry out concurrent monitoring of programmes. The SLEC, in their meetings held in April and July 2008, decided to constitute an evaluation team to monitor and evaluate the activities of the Mission.

It was seen in audit that:

- The TSG had not been formed (June 2009), concurrent monitoring of the programmes was not effectively carried out and a State level mechanism to monitor/evaluation did not exist in the SHM.
- District Missions in the test-checked districts were not receiving monthly progress reports from the block level/field level implementing units.
- MoUs for projects implemented by various agencies viz., KAU, VFPCK etc. included provision for sending monthly progress reports to the SHM. However, in the projects test-checked, the agencies executing the project were not furnishing progress reports regularly to the SHM.

Lack of a proper monitoring and evaluation mechanism in the SHM resulted in non-implementation or delays in the completion of projects and inclusion of non-viable schemes in successive annual Plans. The Director, SHM stated (September 2009) that only skeletal staff was available in the headquarters, as a result of which, monitoring and evaluation could not be done effectively.

Conclusion

The State Horticulture Mission (SHM) has been functioning from 2005-06. Out of its various interventions, organic cultivation practised in Wayanad District showed significant improvement with Mission funding. Rural marketing facilities established by the Vegetable and Fruit Promotion Council, Keralam with assistance from the SHM were providing a much needed avenue to farmers to sell their products directly to the customers. Infrastructure facilities created by the Seed Production Centre of the Vegetable and Fruit Promotion Council, Keralam achieved substantial progress in the production of vegetable seed.

However, it was also seen that Annual Action Plans were prepared without basic data and proper evaluation. During 2005-2006 to 2007-2008, the district Missions and field level units were not involved in the preparation of Annual Action Plans. Consequently, the targets were unrealistic and were not achieved. During 2005-09, 42 per cent of the grants received from Central and State Governments remained unutilised.

Model/small nurseries were sanctioned without proper examination or evaluation of projects. Though funds were utilized for rejuvenation/replacement of senile pepper plantations in Idukki and Wayanad Districts, the production and productivity showed a sharp decline, indicating failure of the scheme in these districts. Post-harvest management functions, which were essential for improving marketability of agriculture products could not be established even though funds were available. The fact that the area of cultivation of most of the crops assisted by SHM declined over the years indicated that intervention of the SHM was not effective in increasing the production and productivity of horticulture crops. The existing monitoring and evaluation system was inadequate, resulting in poor execution of projects and inclusion of non-viable schemes in successive Annual Plans.

Recommendations

- The SHM should assess the extent of horticulture crops in the State and ascertain field level requirements before preparation of Annual Action Plans.
- Schemes/programmes should be proposed based on actual requirements and the capacity of the SHM to execute them.
- The SHM should take proactive action to ensure timely utilisation of funds released to Agricultural offices and implementing agencies.
- Rural marketing facilities established by the Vegetable and Fruit Promotion Council, Keralam should be extended to all the Blocks/ Panchayats to enthuse farmers.
- The SHM may evaluate the causes for the sharp decline in pepper production before further release of funds for the rejuvenation programme.
- District level and State level inspection and monitoring mechanism should be strengthened.

The above points were referred to the Government in August 2009. Reply had not been received (October 2009).

[Audit Paragraph 1.1 contained in the Report of the Comptroller and Auditor General of India for the year ended 31st March, 2009 (Civil)].

(Notes furnished by Government in the above audit paragraph is included as Appendix II).

Replying to the query of the Committee about the survey to prepare Annual Action Plans for SHM, the Director SHM, who assisted the Secretary, Agriculture Department informed that no baseline survey had been conducted before the commencement of the project, but 7-8 years after its implementation, the department had initiated a base line survey and had started again from grass root level. The basic data available with Economics and Statistics Department was used for preparing Annual Action Plan (AAP) which was formulated at district level. Then the Committee pointed out that the success of the programme could not be evaluated as its objective at the initial stage was not fixed and a comparative study was also not possible. The witness clarified that the plan was prepared on the basis of random sample methodology, which was conducted every year by the Department of Economics and Statistics. Therefore, the position at every year could be fetched. At the same time some defects like the decline of production and cultivation area of certain crops were found in spite of the earnest efforts of the department. On a query of the Committee the witness responded that as the cultivation data of crops was not available, a census programme was started recently and an amount of ₹ 2 crore was sanctioned by the Government of India for the annual action plan for the current year. The Committee then enquired about the details of pilot study for conducting census. The witness replied that a census was conducted by the GOI in 3 states viz., Kerala, Andhra Pradesh and West Bengal. In Kerala, pilot study was conducted in Idukki and Malappuram districts and door-to-door enumeration was done with the help of Area Development Society at Panchayat level.

2. While discussing the audit findings regarding the deficiencies in preparation of Annual Action Plans, the witness admitted that during earlier period of its implementation, the department had failed to prepare the AAP (Annual Action Plan) by participating the field level groups but from the year 2008-09 onwards they started the participatory preparation of AAP by considering the demands from the farmer class and the peoples' representatives and forwarded to GOI for approval. The Government of India would approve the AAP in principle and would release funds. During 2008-09 only 50-60% of the funds were sanctioned. To a query of the Committee regarding the release of fund, the witness

informed that central fund was being received from 2005-06, but as the sanctioned amount of ₹ 35.33 crore was released only in March 2006, an amount of ₹ 1.7 crore only could be expended. For the financial year 2006-07 again an amount of ₹ 79.59 crore was sanctioned but the expenditure during that year was ₹ 24.42 crore only. The witness further informed that the main reason for the non-utilisation of fund was the shortage of required staff in the Mission.

3. When enquired about the preparation of Annual Action Plan, the witness answered that it would be prepared after conducting a district level workshop on the basis of the basic data gathered from beneficiary farmers at Panchayat level. That was inclusive of components like seed production, extension of cultivation, organic farming, marketing, integrated pesticide control, manuring etc. After a detailed discussion with the beneficiary farmers listed from Krishi Bhavan and representatives of local bodies the district level plan would be formulated. AAPs from 14 Districts would be collected and finalised at State level by a Committee consisting of the Hon'ble Minister, APC and the Secretary, Agriculture Department. At the initial stage the department had prepared action plan based on the data of the Economics and Statistics Department and after 3 years, the department had modified the methodology by collecting the requirements from some outstanding panchayats, without any macro data and then multiplied it for arriving the figure at district level or State level. When asked about the district Mission, the witness replied that from the very beginning a district level committee was functioning with District Collector as Chairman.

4. The Committee perceived from the audit paragraph that in spite of the fund allocation, the department had not constituted a Technical Support Group (TSG) as stipulated in the guidelines and sought to know the reason for that. The witness explained that the TSG was constituted in 2010 itself and an amount of ₹ 2 crore was allotted for the expenditure like sitting fee and honorarium to the members of TSG. The Committee remarked that allocation of ₹ 2 crore simply for the expenditure of the TSG having 10 members was a best example for the unrealistic planning of the Mission. The Committee urged the department to prepare a realistic plan in future by assessing field level requirements and considering the drawbacks experienced during past years. The Committee also suggested that participation of some nodal institutions or district level TSG should be ensured while formulating district level action plans and the District level TSG should be formed in every district to enable a proper vetting at district level and to avoid over estimation.

5. The witness informed the Committee that while preparing the AAP for the current year, the projects for collection, grading and packing of vegetables

were included. Moreover, districts having large scale production of vegetables, like Alappuzha, Malappuram and Wayanad were asked to furnish project for ₹ 10 lakh each for establishing a market enabling the producers to procure and sell vegetables. The Committee, by pointing out the example of Kanjikuzhi and Mararikulam panchayat in Alappuzha district, directed to adopt a similar methodology at panchayat level in which harvest, processing and marketing could be done by the farmers. As farm fresh vegetables could be made available, the demand for vegetables had increased and there by minimum price could be assured to the producer. The Committee stressed that the AAP for 12th Five Year Plan should include such innovative programmes. The Committee suggested that necessary steps to correct the drawbacks so far faced by the department in the formulation of Action Plan and prepare a benchmark action plan for the 12th Five-year plan incorporating such novel venture.

6. The Committee opined that the low utilisation of GOI fund exhibits the irresponsibility of the department and enquired the reason for the non-utilisation of funds in spite of adequate machinery and manpower. The Committee intended to know whether there was any difficulty found in the norms regarding utilisation of funds. The witness stated that about 30-40% of the sanctioned amount was for establishing post harvest infrastructure which include cold storage, packing unit, Reefer van, primary processing unit etc. But no movement was made either by the producers or by Local Self Government Department for establishing post harvest structures like cold storage, usage of which aroused only if there would be surplus of vegetables accumulated in market. As per norms, the grant allotted for post harvest management is $33\frac{1}{3}\%$ for backward areas like Idukki and Wayanad and 25% for other areas. Later the percentage was enhanced as 40 and 55 respectively. The balance portion would be borne by the growers. Since a huge amount was needed as their share, they were reluctant to spend money for establishing post harvest infrastructures such as cold storages. The Committee remarked that even if the department had not granted fund, the farmer group would be bound to spend money for primary processing of their crops. The Committee suggested that an awareness programme among the beneficiary farmers should be conducted before establishing such a cold storage facility. Regarding a question of the Committee about the existing cold storage facilities, the witness replied that under the component of post harvest management a Centre for Perishable Cargo with a cold storage facility having capacity of 150 MT was established at Cochin International Airport in association with CIAL. Currently, the storage has been kept idle. The Committee was of the opinion that the storage facility should be installed at nearby places of production area. The witness responded that if 25% of the expenditure could be provided as state share, the facility could be established successfully.

7. The Committee opined that as a State of exporting farm products, if we fully utilize the amount for its intended purposes the GOI would allocate necessary funds for assisting our financial needs. If the farmer class would not be in a position to spend money, the matter should be taken up with co-operative institutions. As primary processing of farm produce is very important, priority should be given for that. Further the Committee suggested to prepare a detailed project proposal in respect of each crop with its merits and drawbacks. The witness stated that they were exercising such a method for preparing project proposal. At this juncture, the official from the office of the Accountant General intervened and opined that the preparation of Action plan without identifying the beneficiaries would not be fruitful and the funds could not be utilized fully.

8. When asked about the position during the financial year 2010-11, the witness informed that an amount of ₹ 66.25 crore was released against the amount of ₹ 83.88 crore as per approved AAP. But the total receipt was about ₹ 88 crore including the unspent balance of ₹ 12.95 crore after revalidation. The central assistance was fixed according to the spending capacity of each state and as per the instructions from GOI; the AAP should be prepared within the spending capacity. Hearing this, the Committee urged the department to examine the feasibility of making necessary changes in the AAP for the next year within the frame of the existing norms of Government of India and also considering the peculiarities of Kerala, so that maximum utilization of fund could be achieved.

9. The Committee also directed to furnish a report comprising the changes, which should be brought to the existing norms to alleviate the difficulties faced in utilizing the fund properly. The witness agreed to do so.

10. Then, the Committee asked about the measures taken by the department on 'farmer suicide' incidents in Palakkad, Wayanad and Kasaragod districts. The witness explained that even though the GOI had sanctioned an amount of ₹ 46.33 crore for the past four years for those districts in principle, no amount was released. Instead it was instructed to execute regular activities by including in the ongoing schemes of the National Horticulture Mission as per the existing norms. An amount of ₹ 42.89 crore was expended for seed production in these 3 districts giving priority to extend pepper cultivation, pepper rejuvenation, rehabilitation and organic farming. An organisation namely Organic Consortium had been functioning actively for the promotion of organic farming and financial assistance had also been rendered to them for creation of water sources and apiculture. He also added that there had been a project for assisting mango growers in Palakkad district.

11. When the Committee enquired about the finalisation of annual accounts the witness answered that the annual accounts up to the year 2009-10 were audited and submitted to GOI and the annual accounts for the subsequent year would be completed within 2 months.

12. Regarding seed infrastructure, the witness informed that two projects were established at Alathur and Vellayani. Currently, about 66-70% of the seed requirement could be met with these projects. When the projects were selected, wide publicity was given through media, and seminars were conducted at panchayat level and awareness camps at district level. The proposal for the project is put forward at district level and vetted by TSG after appraising feasibility. Large-scale seed production was not practised till last year and so not turned up for licence. Breeder seed and certified seed only were produced and distributed without licence by the Kerala Agriculture University. Similarly, VFPCCK collected paddy seeds from farmers and tested in their laboratories at Alappuzha and Pattambi and based on the test results Certificates were issued. Like other states, Kerala does not have a certification board, instead the officials from Agriculture Department would collect the samples and test at their lab. An Additional Director of Agriculture Department is authorised for giving certification. The certification for vegetable seeds by the University from the year 1971 onwards is based on the concept 'Truthfully Labelled Seed'. Currently, as the licence is mandatory for trading seeds, they would take up the matter seriously. Even though the production is up to the mark, there are certain limitations such as inadequate manpower and low wages. In response to this, the Committee directed the department to make use of the service groups such as Land Army, Green Army etc., for this purpose. The Committee also suggested that in order to promote the labour bank concept, it would be more beneficial to engage labour group from nearby panchayats by paying adequate wages. If such a practice comes into force, the problem of recruitment would not be there. The Committee decided to recommend that such innovative practices should be adopted for the successful functioning of the projects.

13. Regarding the establishment of nurseries, the witness informed that in the first stage there was neither Memorandum of Association nor Memorandum of Understanding with Horticulture Mission. Hence, production as per norms was not fulfilled. Later the situation was changed. Currently MoU between Agriculture Department and district nurseries are executed, in which the number of planting materials to be produced is mentioned. Moreover, a Committee constituted for examining the quality of nurseries would inspect the nurseries.

14. In reply to the Committee's query about the reason for granting assistance to nurseries which did not have the stipulated minimum area, the witness answered that in some places, small nurseries having less than one hectare were taken under the purview of the scheme with the intention of establishing nursery at that particular place but sanction would be accorded with a condition to produce required number of plantlets as per the norms. The Committee came to know that in a nursery at Pampadumpara, only 6240 planting materials were produced out of a target of 4 lakh. The Committee expressed its dissatisfaction about the overall activities of the nursery and opined that majority of nurseries established under SHM are not capable of producing plantlets as per norms whereas many nurseries having low facilities in the private sector reaped many lakhs as profit. The witness reported that as per GOI norms, the target of a model nursery is 4 lakh plantlets. Currently, the Horticulture Mission had been monitoring the activities of nursery effectively. The only difficulty was the shortage of skilled labourers.

15. The Committee inquired the circumstances under which subsidy had been granted to four small nurseries which did not possess the stipulated minimum area of four hectares. The Director, State Horticulture Mission replied that at the implementation stage, 4 hectares of land was not available at a single point, and hence decision was taken to consider different plots at different locations in granting subsidy. Currently, number of model nurseries established in public sector and private sector are 29 and 5 respectively. When asked about the performance of nurseries in Kerala, the witness answered that at the point of time such an up to date data was not available and assured to furnish a list of nurseries to the Committee soon. He added that as per the existing norms financial assistance would be provided for setting up of new nurseries and for rejuvenation of the existing ones by extending area. For establishing small nurseries, there should be a minimum of 2.5 acres of land, sufficient mother plants and irrigation facilities. When the Committee inquired about the reason for the nurseries running in loss, the witness informed that even though the situation was pathetic in its implementation stage, it had improved later. The Committee understood that the department lack vital bench mark data relating to nurseries and decided to recommend for the creation of a database regarding nurseries under the control of State Horticulture Mission incorporating the best practices followed by them. The Committee was also doubtful about the well maintenance of the nurseries and hence directed the department to furnish the status report detailing the functioning and productivity of each model nursery to the Committee. The Committee pointed out that some nurseries in private sector have larger productivity than the nurseries owned by the Agricultural University and desperately remarked that the nurseries under the control of the Agricultural University have not even reached up to the

standard which revealed that many beneficiaries under the scheme were not actually interested in the field. The Committee then suggested that a critical review should be done while rendering assistance for establishing nurseries and directed the department to conduct a feasibility study on what changes could be made in the application module for selecting beneficiaries and to furnish a detailed report to the Committee. The Committee also urged the department to prepare a detailed project proposal which enables the State Horticulture Mission to extend financial support to existing private nurseries for the specific expansion project and submit it to the Central Government.

16. The Committee pointed out that the department had failed to utilise the amount released as subsidy to the nurseries for production of pineapple. Audit revealed that in Nadukkara Agro Processing Centre Limited (NAPCL), Muvattupuzha only 2500 plantlets were produced which had a production capacity of 50000 plantlets. The witness replied that the plantlets produced in the Agricultural University Laboratory were hardened in the nurseries and issued to the farmers. The shortfall in the production was due to the failure of the Kerala Agricultural University in producing sufficient plantlets to be supplied to nurseries for hardening. When the Committee highlighted the case of pineapple growers of Ernakulam and Thodupuzha region who cultivated pineapple as an intercrop with rubber plantation, thereby reaping an additional income, the witness submitted that those growers were granted financial assistance @ ₹ 15,000 per hectare by SHM and added that they were using suckers instead of plantlets developed by tissue culture. A Tissue Culture Lab (TCL) was allotted to the Kerala Agricultural University in order to multiply the long preservable MD2 variety, the product of which could be used for exporting, but that variety had not got much acceptance among the traditional growers rather they preferred to use suckers from mother plants. Another difficulty was the shortage of skilled labourers in the Kerala Agricultural University. The witness supplemented that awareness programmes were conducted among farmers in this regard and expected gradual change in their attitude. The Committee was informed that there were 22 TC Labs functioning under the SHM and the TC Lab established at Vazhakkulam was exclusively for producing pineapple plantlets. When asked about the performance of the lab, the Director of Research, Kerala Agricultural University replied that the yearwise number of suckers and plants produced during the period from 2007 to 2010 were 2500, 2500, 33050 and 10,000 respectively. When the Committee asked the reason for shortfall in the production during the year 2010, the witness informed that in 2009, 33050 number of planting materials were produced as per the agreement executed with the Agro Processing Centre at Nadukkara for supplying MD2 variety. If the trial version at Nadukkara proved successful, the MD2 variety could be produced in large scale. The Committee analysed that a period of 5 years would

be sufficient for spreading an innovative project. The witness clarified that due to the slow growth and low profit, the growers within the State were reluctant to cultivate the planting materials produced in the Lab. Then the Committee wanted to know the alternative innovation programme launched by the department. The witness informed that currently, the department have developed an improved variety namely Amruta, in which the rate of multiplication of plantlets was very high thus expecting to supply a large number of plants within a year utilising the existing facility of the Lab. Hearing this, the Committee directed the department to examine the feasibility of utilising the available facility of the TC Lab at Vazhakulam for the production of the new varieties on a time bound manner. The Committee also enquired about the reason for the failure of the variety MD2 and the circumstances under which the variety turned unpopular among the cultivators. The Committee directed that a report in this regard should be furnished at the earliest.

17. The Committee realised that the area expansion programme through establishment of the new gardens for increased production and productivity of horticulture crops could not be achieved as envisaged in the guidelines. The witness deposed that the main reason for this was the non-availability of suitable land for expansion. He put forth the example of mango orchard established at Muthalamada in Palakkad District. As per the guidelines, the norm for assistance was 253 mango trees per hectare. But the required area was not available as a single unit. Considering the geographical circumstance of our State it was implemented by planting one mango tree each in the courtyard of every household so as to reach out the number 253. This innovative proposal was accepted by the Government of India. The Committee analysed that in Kerala most of the crops grow in homestead garden as intercrop due to which it would not be practical to compute the number of plants per hectare. The Committee noted that even though a good amount was spent for the area expansion programme and for increasing production, the cultivation area was on decreasing trend and the Committee sought the reason for such a situation. The witness pointed out that the main reason was the use of Random Sample Technic adopted by the Economics and Statistics Department. He defended that at present the situation has been changed considerably and as per the latest evaluation conducted by the Centre for Management Development (CMD), the new gardens under vegetable area increased by 104 per cent and production by 488 per cent. The cultivation area for pineapple was increased by 600 per cent and for banana it was increased by 68 per cent. When the Committee sought for the opinion of the Accountant General in this regard, he clarified that the decline in area was in the case of cultivation of pineapple, ginger and pepper only. At this juncture, the witness informed that in the case of pineapple it was being cultivated as intercrop with newly planted/

replanted rubber plants. The Committee arrived at the conclusion that the department had pathetically failed in keeping a reliable statistical data about the Horticulture Sector as a whole. The data collected by the CMD was inconsistent with the same done by the Department of Economics and Statistics. In this connection, the Committee instructed that the SHM should come forward to evolve a uniform methodology after discussion with the Secretary, Agriculture Department and should formulate a reliable benchmark data. When the Committee enquired whether the growers were interested in the prevailing schemes, the witness replied positively. The Committee directed to furnish the crop-wise details of area taken over by the Mission in each year under the garden expansion scheme including the subsidy amount disbursed.

18. On the audit observation regarding the rejuvenation of Senile Plantation, the witness, Secretary, Agriculture Department stated that in Wayanad area, financial assistance was granted to pepper growers for replacing the senile and unproductive pepper plants by fresh and young pepper vines in the disease free soil and the project was very successful. A Panchayat level training programme was also conducted among the growers about the usage of bio-control agents like *Pseudomonas* and *Trichoderma vermi*, produced in the bio-control labs supported by SHM. Thereafter the rate of disease was found diminished. The land after removing the senile plants would be kept fallow for a whole summer season after applying lime in soil. Rejuvenation was being done by planting fresh pepper vines produced from mother plants developed in Panniyoor. For this, the assistance from Indian Institute of Spices Research, Calicut was also availed. The Committee observed that even though the project was said to be successful, out of the physical target of 65000 Ha area, only 33000 Ha area was covered for which an amount of ₹ 42 crore was spent. When the Committee enquired about the reason for the low achievement, the witness replied that the small-scale farmers were hesitant to remove the old and senile plants, as there was considerable yield among them. To a query of the Committee about the progress of the programme, the witness was optimistic and informed the Committee that the yield from the parental breed cultivated in homestead garden is less than the yield from the high breed variety. Then the Committee opined that in our State, productivity is less compared to other States as most of the farmers concentrated in homestead garden instead of plantations thereby ignoring the product maximisation from each crop. The witness supplemented that currently the Spices Board had bestowed their attention on cultivation also which, generally was not their field of operation. The rejuvenation programme implemented by the SHM in Idukki was taken over by Spices Board and they have procured an amount of ₹ 68 crore from the Ministry of Commerce for Wayanad District. But due to the lack of manpower for implementation, they are paying the assistance to the farmers simply by counting the number of plants,

some of which comes under the purview of the scheme implemented by SHM also. Noting this dual assistance to a single crop by two separate agencies, the Committee was astonished and commented that there should be a co-ordination between the activities of SHM and Spices Board, otherwise it would become a cash distributing project only. The Committee directed that the SHM should submit a detailed proposal for co-ordinating the activities of SHM and Spices Board through Agriculture Department and fund transaction should be routed only through Krishi Bhavans.

19. The Additional Chief Secretary and the Agriculture Production Commissioner, who attended the meeting, clarified that the target of the scheme was the expansion of cultivation area. As the erstwhile pepper plants turned senile and unproductive, it was decided to rejuvenate it. Then the Committee wanted to know the measures taken to ascertain that disinfected plantlets were selected for replanting. The witness informed that quality of pepper vine was ensured by the district level monitoring committee. In addition to this, periodical inspection by scientists from the Indian Institute of Spices Research, Kozhikode and employees from Directorate of Arecanuts and Spices were being conducted. Regarding a query of the Committee about the transfer of technology among the farmers, the witness reported that Organic Agriculture Consortium at Wayanad and Highrange Organic Producers Society at Adimali were assisting the growers for transferring the technology. But their venture could not said to be cent per cent successful. It would be more effective if implemented through panchayat level farmers associations like 'Karshaka Koottayma'. The Committee was satisfied with the cash transfer system and commented that there should be an effective mechanism to ascertain the use of approved planting materials and the application of approved cultural practices by availing the service of local growers society. The Committee emphasized the need for the co-ordination between Spices Board and SHM and the Agriculture Department should be vigilant to ascertain that these agencies were implementing schemes through Krishi Bhavans. The APC agreed to the recommendations of the Committee and informed that discussions would be held with Spices Board as a part of Idukki package.

20. The Committee was informed that the organic farming had been carried out in 14797 Ha. of land with the certification of SHM. The APC informed that other than SHM some Bangalore based agencies and the GOI approved agency, INDOCERT were competent to issue certification for organic farming based on which many products were being exported. When the Committee enquired whether the department had any information about those agencies and the products certified there upon, the APC answered that at present there was no mechanism to do so. The central agency to decide the international and national standards for certification viz. Agricultural Products Export Development Authority (APEDA)

gave accreditation to the certifying agencies. The Committee treated it as a grave mistake on the part of the department and directed to furnish the district/panchayat wise details like organic farming under certification, certifying agencies and the agricultural products, which were exported with certification. The Committee suggested that cultivation under organic certification, should be done experimentally without applying chemical pesticides and fertilizers on those land at least for 3 years and then the soil should be tested for verifying the presence of residuals. At this juncture, the witness reported that it was the responsibility of the certifying agency. Samples of soil and plant materials were repeatedly tested for first 3 years of cultivation by classifying the conversion period as C₁, C₂ and C₃ and thereupon the certification would be awarded.

21. At that point, the Agriculture Production Commissioner stated that though SHM had initiated organic farming, the subsidy component was not attractive for farmers and there was no provision in the prevailing norms to compensate the loss due to drop in production in the initial years of cultivation. To a query regarding the rate of subsidy, the witness informed that the subsidy would be 50% of ₹ 40,000 which is the estimated total expenditure per Ha. Out of this subsidy, ₹ 10,000 was meant for cultivation and ₹ 10,000 for certification. The farmers after availing the first instalment of assistance are forced to give up the organic farming technology and return to the old methodology. If some farmers in the area abandoned organic farming it would affect organic certification adversely as certification was given for a contiguous area of farming and not for a single grower or a crop. If one or two members retreated from the group, others would also be eliminated from the network for assistance.

22. The Committee analysed that the interest of the growers in continuing the organic farming could be ensured only if certain measures like enhancement of subsidy amount, programme for area development etc., could be adopted. As organic farming require contiguous area, if common infrastructure facilities like land development or irrigation could be executed as a part of the scheme, interest of member growers in the scheme could be enhanced. When the witness informed that such a group system was established in Wayanad area only, the Committee recommended that in order to promote scope for organic farming, the individual assistance for organic farming should be enhanced. Further, a scheme should be framed so as to provide financial assistance to the farmers of contiguous area for facilitating common infrastructure development in addition to individual subsidy.

23. The Agriculture Production Commissioner pointed out that a parallel scheme implemented by both Agriculture Department and SHM, which experienced non-optional intervention in many areas. If both the schemes were

integrated, more amount could be spared for the purpose. The Committee perceived from evidence that in Wayanad area, certified organic farming, pepper vine rejuvenation/replanting etc., were executed successfully.

24. During evidence, the Committee came to know that 7 bio-control labs out of 8 setup under the control of SHM were functioning in the State. Regarding a query about the last years' production, the witness answered that 32 tones of Pseudomonas, 12.26 tones of Trichoderma, 1538 Nos. of Phiromon traps and a bio-control insect called Porotra Litura were produced in the bio-control lab attached with College of Agriculture, Vellayani. Even though the target was fixed as 1500 tonne per year; about 675 tonne only could be produced in those labs. When enquired whether any study regarding its utilisation was conducted, the witness replied that field level study about the effect of Pseudomonas and Trichoderma were being done in vegetables and banana. As the organic farming policy was declared in the State, demand for bio-control agents had been increased considerably and the production in every lab could be increased as per demand. To another query of the Committee about its cost, the witness informed that Pseudomonas and Trichoderma were available in the powder form which costs ₹ 60-70 range. The Agriculture Production Commissioner informed that a new bio-control agent from the leaves of Tapioca had been developed by the Central Tuber Research Institute. When the Committee desired to know about the performance of bio-control labs, the witness answered that the performance of the lab at Vellayani College of Agriculture, lab at Mannuthi under the control of Agriculture Department and the lab established under the control of Krishi Vijgan Centre at Wayanad are remarkable.

25. When asked about the subsidy pattern, the witness replied that it would be credited into bank account of the growers with a condition to follow practices stipulated in the norms of the scheme. The Committee emphatically directed that when the subsidy is disbursed, a practice should be evolved to monitor the timely follow up action.

26. The Committee expressed its dissatisfaction over the short fall in the amount disbursed as subsidy during the year 2008-09 out of the high target and enquired the details of financial assistance rendered during the year 2009-10. The witness answered that the target during 2009-10 was 42000 Ha. But the output was for 32000 Ha. The Committee noted that during the year 2008-09, the assistance was given only to 3000 Ha. against the target of 30000 Ha. and enquired the reason for the shortfall. The APC informed that during the year 2008-09 the performance of the SHM was very poor in all indications and due to the shortage of staff they could not function properly. The growers demanded for cash subsidy instead of issuing planting materials or manure. So SHM required more time to

switch over to allotment of subsidy in cash. Currently the subsidy is disbursed by way of cash transfer into the account of growers after conducting an evaluation of the cultivation by the concerned Agricultural Officer.

27. When asked about the means of marketing, the witness informed that marketing was being operated through Vegetable and Fruit Promotion Council, Keralam (VFPCCK). The SHM had provided assistance for the establishment of 22 rural markets by VFPCCK and all of them were functioning satisfactorily.

28. The witness, then informed the Committee that farmers at Vattavada and Kanthalloor were supplied with vegetable seeds, manure and amount in advance by the merchants from Tamil Nadu for cultivation and they used to collect the produce in bulk. To avoid this, Vattavada and Kanthalloor region were included in Idukki package and the project proposal for ₹ 16 crore had been submitted. The proposal included all processes from production to exporting. It was expected to be executed as a joint venture of the Vegetable and Fruit Promotion Council, Keralam, the State Horticulture Mission and the Agriculture Department. The Committee was dissatisfied with the meagre interference of the department in marketing zone and suggested to formulate a strong marketing strategy with special attention for the primary processing of horticultural products.

29. At this moment, the CEO, Vegetable and Fruit Promotion Council, Keralam, informed that 260 rural markets were functioning successfully all over the State under the control of VFPCCK. The turn over for the year 2010-11 was ₹ 157 crore and anticipating a turn over of ₹ 180 crore for the current year. Rural markets with primary facilities were established at panchayat level by the state Government with 25% assistance of SHM. About 10-15 new outlets were being opened every year. In Palakkad region a number of growers were focused in vegetable plantation only without any assurance on the procurement of their products. If the farmers could be assured regarding procurement, the production of vegetables could be increased to such an extent so as to export it as per demand. The Committee disagreed to the contention of the department and remarked that entire public money could not be expended for a single project. When enquired about cold storage facility in the outlets of VFPCCK, the CEO, VFPCCK replied that they are proposing to install a cold storage having 10 tonnes capacity in markets at a cost of ₹ 4 lakh each. In this connection, the Committee recommended that as a help to the small scale farmers, electricity required for operating small scale cold storage should be made available free of cost.

30. The Committee remarked that growers were not interested in the cold storage though it being a prime component of post harvest. At the same time

primary processing of agricultural products was essential for its marketing. So the Committee directed the department to conduct a feasibility study for including the primary processing of agricultural products within the purview of the existing norms of SHM for post harvest processing. The APC agreed to the suggestions of the Committee and acquainted that even though 50% subsidy would be given for providing cold storage facility nobody preferred to avail it because of the high rate of electricity charges. The Committee opined that for drying pepper some hygiene standards should be specified so that pepper drying up to that standard could be provided with certain assistance under primary processing. The Committee wondered to see that the amount of ₹ 10 crore spent for establishing a cold storage at CIAL was futile as it was not benefited by the growers. The APC clarified that a cold storage complex at Cochin International Airport was established for the purpose of storing agricultural products from the growers at Idukki and Nilambur before it could be exported. But currently the beneficiaries of that cold storage are the middle merchants from Coimbatore who procured agriculture products from the growers during harvest season and exporting to foreign countries and thereby reaping huge profit. The APC pointed out that our State lacks any orientation system for procurement and export because our State never experienced surplus of vegetables or export oriented vegetable production.

31. Regarding 'Monitoring and Evaluation', the APC stated that latest evaluation was conducted by Centre for Management Development. The concurrent evaluation pointed out by the Comptroller and Auditor General of India had also been included in that Report. The Annual Report of the SHM was also published. The Committee suggested that SHM should support the students doing project works at Agriculture Colleges by providing them with financial assistance. When the witness informed that such system was being practiced in the Agriculture College at Vellayani, the Committee directed the department to frame a scheme for monitoring and evaluating the activities of SHM by participating the scholars also as a part of their project works and such research scholars should be provided with scholarship.

32. The Committee wanted to know whether any of the recommendations of the Comptroller and Auditor General of India had been implemented by SHM. The APC answered that the extension of Horticulture crops in the State and field level requirements could not be ascertained accurately as there was no base line data available in this regard. The Action Plans prepared based on the data of the Planning Board was not very realistic.

33. Regarding the utilisation of Government of India funds released to Agricultural Offices and implementing agencies, the Committee emphasized the need for the utilisation of Government of India assistance appropriately otherwise fund allocation for the consecutive years would be reduced. By pointing out the

recommendations of the C&AG about the establishment of rural marketing facilities by VFPCCK to all blocks/panchayats to enthuse farmers, the Committee enquired the programmes chalked out for expansion of outlets. The CEO, VFPCCK replied that the outlets were being established step by step. Normally 15-20 Self Help Groups in a region were clustered to develop it into Self Help farmers market for establishing an outlet, which was a time consuming procedure. The Committee directed to chalk out a unique time frame programme for the expansion of such outlets. The CEO informed that in coastal belts cultivation of crops was not done commercially and hence establishment of outlets in such region require more time. However, he has agreed to do his level best for implementing the recommendations of the Committee. The Committee arrived at the conclusion that the deliberations revealed that the findings in the audit report were realistic and directives to take corrective measures. But the Department turned a deaf ear to the audit findings. All the stakeholders should be keen and alert to the queries of the C&AG and prompt remedial action should be taken.

Conclusion/Recommendation

34. **The Committee understood that SHM had not prepared the mission document for the entire Mission period (2005-2012). It remarked that the department had implemented the project without conducting any baseline survey or adequate preparation and as the objective of the Scheme was not fixed, the achievement of the project could not be evaluated. The Committee also views with grave disappointment that the department had not rectified these defects even after a lapse of 5 years. The Committee urges the Agriculture Department to complete the pilot study for conducting census regarding the cultivation data in a time bound manner incorporating the details for designing the Action Plan during the 12th Plan itself.**

35. **The Committee recommends to finalise a methodology urgently for preparing the district wise database incorporating all the details regarding productivity and the area under cultivation, which could be used as a basic document for the 12th Plan.**

36. **Towards the audit objection regarding deficiencies in preparation of Annual Action Plan, the Committee understands that the exercise was done without involving the district missions and the field level units, which shows the callous attitude of the department in preparing the Annual Action plan. It observes that without assessing the beneficiary groups, they prepared irrational and unrealistic action plan which resulted in under utilisation of Central assistance during 2005-2009.**

37. **Therefore, the Committee urges the department to prepare a fool proof and realistic Action Plan by assessing field level requirements taking into account the earlier drawbacks. The Committee recommends that while formulating district level Action Plans participation of some nodal agencies or**

district level TSG should be ensured and the district level TSG should be formed for each district enabling proper vetting at district level itself and to avoid over estimation.

38. Pointing out the examples of Kanjikuzhi and Mararikulam Panchayaths in Alappuzha District, the Committee recommends to develop a methodology at Panchayath level in which harvesting, processing, and marketing of products would be carried out by the farmers' groups themselves. The Committee urges the department to clear the drawbacks faced by the department in the formulation of Action Plan and prepare bench mark Action Plan for the 12th five year Plan incorporating such novel ventures.

39. Regarding the audit paragraph on low utilisation of funds the Committee feels that if the department had observed a time bound action plan towards the establishment of post harvest infrastructure facilities as per Government of India norms, the low utilisation of Central fund during 2005-09 and consequent shortfall in the release of Central fund to SHM in subsequent years could have been avoided. As the primary processing of farm produce is very essential, the Committee recommends to prepare a detailed project proposal in respect of each crop with its merits and demerits without further delay.

40. The Committee urges that the department should examine the feasibility of making necessary changes in the AAP for the next year within the frame work of the existing norms considering the peculiarities of Kerala for the maximum utilisation of Central fund. It also wants the department to furnish a detailed report regarding the changes to be made in the existing Government norms for alleviating the difficulties in the utilisation of Central funds.

41. The Committee observes that one of the main issues faced by the department while implementing projects was the deficiency of labourers. As a solution it recommends that the department should promote innovative labour institutions such as Land Army, Green Army, Labour Bank etc. for the purpose. The Committee suggests that labourers may be attracted from nearby Panchayaths by paying adequate wages.

42. The Committee expresses its dissatisfaction on the overall performance of nurseries, citing the example of the nursery at Pampadumpara where only 6240 plantlets were produced against the target of 4 lakh. The Committee opines that majority of nurseries under the control of Agricultural University are not capable of producing plantlets as per norms, whereas many in the private sector having low facilities reaped lakh as profit.

43. The Committee recommends to create a database regarding nurseries under the control of SHM and directs to furnish the status report of those nurseries detailing the functioning, productivity and the best practices followed by them. It also urges to collect the benchmark details of nurseries functioning in Kerala such as variety of cultivation, number of plantlets in each nursery, their total capacity etc. and furnish the same to the Committee.

44. Committee also urges that an expert study should be done before selecting nurseries for extending assistance and directs to appraise the Committee about the study as to what changes could be made in the application module for selecting beneficiaries. It also recommends to prepare a detailed project proposal which enables the State Horticulture Mission to extend financial support to existing private nurseries for the specific expansion and submit it to the Central Government.

45. The Committee understood that the subsidy released to the nurseries for the production of Tissue Culture Pineapple Suckers became futile, as they could not produce the estimated capacity of 50000 plantlets per year even though five years had elapsed since its formation. The Committee remarks that five years period was sufficient to spread an innovative programme and urges the department to report the circumstances which led the MD2 variety of pineapple turned unpopular among growers. It also directs the department to examine the feasibility of developing new varieties in a time bound manner with the available facility of the Tissue Culture Laboratory at Vazhakulam.

46. The Committee observes that the Agriculture Department did not have any reliable data about the Horticulture Sector in the State. The details furnished by the Centre for Management Development were contradictory to that of the Economics and Statistics Department. So the Committee instructs that the State Horticulture Mission should initiate effective steps to evolve a uniform methodology to formulate a unique benchmark data in this regard.

47. The Committee raises doubts about the figures of assistance extended by SHM to farmers as ₹ 207 crore, when the outlay was only ₹ 160 crore and urges the department to furnish the crop-wise details of area taken over by the SHM in each year under the garden expansion scheme along with details of amount disbursed as subsidy. It also recommends that strict measures should be taken to check whether the approved cultivation practices are being followed by the farmers as insisted.

48. The Committee is astonished to know that both State Horticulture Mission and Spices Board of India were providing assistance to the same crop in particular area in a particular period of time. It observes that

State Government had no control over the Commodity Boards. To curtail such discrepancies the Committee recommends that Agriculture Department should co-ordinate the activities of SHM and Spices Board and fund transaction should as far as possible, be routed through Krishi Bhavans rather than issuing them directly to beneficiaries.

49. The Committee also notes that Agriculture Department lacks any information regarding organic farming in our state which is currently becoming popular as a farming practice to be promoted on a large scale in the context of the reported high toxicity in almost all the food items produced in the existing way of commercial cultivation. It urges the Department to initiate a larger role in promoting organic farming in the State and also to furnish the district/panchayath wise details regarding organic farming carried out under certification, name of the certifying agencies and the agricultural products of this type exported with certificate etc.

50. The Committee analysed that the subsidy extended for organic farming was 50% of total cost for cultivation, which is meagre when compared to the loss incurred during initial years of switching over to new mode of cultivation. The Committee observes that the cost of organic farming is very expensive. The price of bio-control agents used in organic farming is not affordable for farmers. The price fixation of organic bio-control agents is unscientific. The Committee evaluates that the claim of the Agriculture Department that Agricultural University is fixing the price of those bio-control agents based on their cost of production is not true. It opines that the Agricultural University does not have any scientific method to fix the price of bio-control agents and the price is being fixed by them arbitrarily that too is followed by organic fertilizer manufactures also and it would not be viable for farmers. In effect, the Committee suspects that, present method of fixing subsidy for bio-control agents is beneficial only for manufacturers and not for the farmers. Therefore the Committee recommends that individual subsidy should be enhanced substantially to meet with the requirements of the farmers. The Committee opines that a mechanism should be evolved to monitor the follow up action of the projects for which subsidy was disbursed.

51. The Committee remarks that unless organic farming was practiced in a contiguous area, the whole efforts become futile and noticing that many farmers were reluctant to continue with the organic farming as the subsidy extended in this regard is insufficient, it recommends that a scheme should be formulated with provisions to assist farmers for infrastructure facilities like land development, irrigation etc. for the area as a whole, where organic farming is carried out under this scheme to catch up with the cultivators in the field. The Committee urges the department to furnish a report incorporating the operational and performance aspects of the bio-control labs functioning in Kerala.

52. The Committee expresses its displeasure over the meagre interference of the department in the marketing zone and opines that due to their least attention in the field, middlemen from other states profited in many places. Regarding the plight of the farmers at Vattavada and Kanthalloor, the Committee wants to know whether the proposed Idukki Package had been implemented including the above two regions with special attention for production, marketing and exporting of their products. So it recommends formulating a strong marketing strategy with special attention for the primary processing of horticultural products. The Committee suggests that some hygiene standard should be preferred for drying of pepper and drying up to that standard could be provided with certain assistance under primary processing. Therefore it directs the department to examine the feasibility of including primary processing of agricultural products under the post harvest processing within the prevailing norms of State Horticulture Mission.

53. Regarding the assistance for cold storage facility the Committee understood that the farmers were least interested in setting up cold storage as maintenance cost like electricity charges was high. The Committee demands to examine whether electricity charges for operating small-scale cold storage could be provided to small-scale farmers free of cost.

54. The Committee urges the department to frame a scheme for monitoring and evaluation of the activities of SHM by engaging the research scholars in the field with scholarship who could implement the scheme as part of their project work.

55. The Committee directs the department to chalk out a unique time frame programme for the expansion of rural marketing outlets by vegetable and Fruit Promotion Council, Keralam (VFPC).

56. The Committee concludes that though eight years had elapsed since the constitution of SHM its achievement is far short of the expectance. It reminds that unless the funds released by the Government of India were utilized more effectively, fund allocation for the consecutive years would be reduced. So the department should be more vigilant in the planning and utilization of Central assistance in future.

Thiruvananthapuram,
12th February 2013.

DR. T. M. THOMAS ISAAC,
Chairman,
Committee on Public Accounts.

APPENDIX I

SUMMARY OF MAIN CONCLUSION/RECOMMENDATION

<i>Sl. No.</i>	<i>Para No.</i>	<i>Department concerned</i>	<i>Conclusion/Recommendation</i>
(1)	(2)	(3)	(4)
1	34	Agriculture	The Committee understood that SHM had not prepared the mission document for the entire Mission period (2005-2012). It remarked that the department had implemented the project without conducting any baseline survey or adequate preparation and as the objective of the Scheme was not fixed, the achievement of the project could not be evaluated. The Committee also views with grave disappointment that the department had not rectified these defects even after a lapse of 5 years. The Committee urges the Agriculture Department to complete the pilot study for conducting census regarding the cultivation data in a time bound manner incorporating the details for designing the Action Plan during the 12th Plan itself.
2	35	„	The Committee recommends to finalise a methodology urgently for preparing the district wise database incorporating all the details regarding productivity and the area under cultivation, which could be used as a basic document for the 12th Plan.
3	36	„	Towards the audit objection regarding deficiencies in preparation of Annual Action Plan, the Committee understands that the exercise was done without involving the district missions and the field level units, which shows the callous attitude of the department in preparing the Annual Action plan. It observes that without assessing the beneficiary groups, they prepared irrational and unrealistic action plan, which resulted in under utilisation of Central assistance during 2005-2009.

(1)	(2)	(3)	(4)
4	37	Agriculture	Therefore, the Committee urges the department to prepare a fool proof and realistic Action Plan by assessing field level requirements taking into account the earlier drawbacks. The Committee recommends that while formulating district level Action Plans participation of some nodal agencies or district level TSG should be ensured and the district level TSG should be formed for each district enabling proper vetting at district level itself and to avoid over estimation.
5	38	„	Pointing out the examples of Kanjikuzhi and Mararikulam Panchayaths in Alappuzha District, the Committee recommends to develop a methodology at Panchayath level in which harvesting, processing, and marketing of products would be carried out by the farmers' groups themselves. The Committee urges the department to clear the drawbacks faced by the department in the formulation of Action Plan and prepare bench mark Action Plan for the 12th five year Plan incorporating such novel ventures.
6	39	„	Regarding the audit paragraph on low utilisation of funds the Committee feels that if the department had observed a time bound action plan towards the establishment of post harvest infrastructure facilities as per Government of India norms, the low utilisation of Central fund during 2005-2009 and consequent shortfall in the release of Central fund to SHM in subsequent years could have been avoided. As the primary processing of farm produce is very essential, the Committee recommends to prepare a detailed project proposal in respect of each crop with its merits and demerits without further delay.

(1)	(2)	(3)	(4)
7	40	Agriculture	The Committee urges that the department should examine the feasibility of making necessary changes in the AAP for the next year within the frame work of the existing norms considering the peculiarities of Kerala for the maximum utilisation of Central fund. It also wants the department to furnish a detailed report regarding the changes to be made in the exiting Government norms for alleviating the difficulties in the utilisation of Central funds.
8	41	„	The Committee observes that one of the main issues faced by the department while implementing projects was the deficiency of labourers. As a solution it recommends that the department should promote innovative labour institutions such as Land Army, Green Army, Labour Bank etc. for the purpose. The Committee suggests that labourers may be attracted from nearby Panchayaths by paying adequate wages.
9	42	„	The Committee expresses its dissatisfaction on the overall performance of nurseries, citing the example of the nursery at Pampadumpara where only 6240 plantlets were produced against the target of 4 lakh. The Committee opines that majority of nurseries under the control of Agricultural University are not capable of producing plantlets as per norms, whereas many in the private sector having low facilities reaped lakhs as profit.
10	43	„	The Committee recommends to create a database regarding nurseries under the control of SHM and directs to furnish the status report of those nurseries detailing the functioning, productivity and the best practices followed by them. It also urges to collect the benchmark details of nurseries functioning in Kerala such

(1)	(2)	(3)	(4)
			as variety of cultivation, number of plantlets in each nursery, their total capacity etc. and furnish the same to the Committee.
11	44	Agriculture	Committee also urges that an expert study should be done before selecting nurseries for extending assistance and directs to appraise the Committee about the study as to what changes could be made in the application module for selecting beneficiaries. It also recommends to prepare a detailed project proposal which enables the State Horticulture Mission to extend financial support to existing private nurseries for the specific expansion and submit it to the Central Government.
12	45	„	The Committee understood that the subsidy released to the nurseries for the production of Tissue Culture Pineapple Suckers became futile as they could not produce the estimated capacity of 50000 plantlets per year even though five years had elapsed since its formation. The Committee remarks that five years period was sufficient to spread an innovative programme and urges the department to report the circumstances which led the MD2 variety of pineapple turned unpopular among growers. It also directs the department to examine the feasibility of developing new varieties in a time bound manner with the available facility of the Tissue Culture Laboratory at Vazhakulam.
13	46	„	The Committee observes that the Agriculture Department did not have any reliable data about the Horticulture Sector in the State. The details furnished by the Centre for Management Development were contradictory to that of the Economics and Statistics Department. So the Committee instructs that

(1)	(2)	(3)	(4)
			the State Horticulture Mission should initiate effective steps to evolve a uniform methodology to formulate a unique benchmark data in this regard.
14	47	Agriculture	The Committee raises doubts about the figures of assistance extended by SHM to farmers as ₹ 207 crore, when the outlay was only ₹ 160 crore and urges the department to furnish the crop-wise details of area taken over by the SHM in each year under the garden expansion scheme along with details of amount disbursed as subsidy. It also recommends that strict measures should be taken to check whether the approved cultivation practices are being followed by the farmers as insisted.
15	48	„	The Committee is astonished to know that both State Horticulture Mission and Spices Board of India were providing assistance to the same crop in particular area in a particular period of time. It observes that State Government had no control over the Commodity Boards. To curtail such discrepancies the Committee recommends that Agriculture Department should co-ordinate the activities of SHM and Spices Board and fund transaction should as far as possible, be routed through Krishi Bhavans rather than issuing them directly to beneficiaries.
16	49	„	The Committee also notes that Agriculture Department lacks any information regarding organic farming in our state which is currently becoming popular as a farming practice to be promoted on a large scale in the context of the reported high toxicity in almost all the food items produced in the existing way of commercial cultivation. It urges the Department to initiate a larger role

(1)	(2)	(3)	(4)
			in promoting organic farming in the State and also to furnish the district/panchayath wise details regarding organic farming carried out under certification, name of the certifying agencies and the agricultural products of this type exported with certificate etc.
17	50	Agriculture	The Committee analysed that the subsidy extended for organic farming was 50% of total cost for cultivation, which is meagre when compared to the loss incurred during initial years of switching over to new mode of cultivation. The Committee observes that the cost of organic farming is very expensive. The price of bio-control agents used in organic farming is not affordable for farmers. The price fixation of organic bio-control agents is unscientific. The Committee evaluates that the claim of the Agriculture Department that Agricultural University is fixing the price of those bio-control agents based on their cost of production is not true. It opines that the Agricultural University does not have any scientific method to fix the price of bio-control agents and the price is being fixed by them arbitrarily that too is followed by organic fertilizer manufactures also and it would not be viable for farmers. In effect, the Committee suspects that, present method of fixing subsidy for bio-control agents is beneficial only for manufacturers and not for the farmers. Therefore the Committee recommends that individual subsidy should be enhanced substantially to meet with the requirements of the farmers. The Committee opines that a mechanism should be evolved to monitor the follow up action of the projects for which subsidy was disbursed.

(1)	(2)	(3)	(4)
18	51	Agriculture	The Committee remarks that unless organic farming was practiced in a contiguous area, the whole efforts become futile and noticing that many farmers were reluctant to continue with the organic farming as the subsidy extended in this regard is insufficient, it recommends that a scheme should be formulated with provisions to assist farmers for infrastructure facilities like land development, irrigation etc. for the area as a whole, where organic farming is carried out under this scheme to catch up with the cultivators in the field. The Committee urges the department to furnish a report incorporating the operational and performance aspects of the bio-control labs functioning in Kerala.
19	52	„	The Committee expresses its displeasure over the meagre interference of the department in the marketing zone and opines that due to their least attention in the field, middlemen from other states profited in many places. Regarding the plight of the farmers at Vattavada and Kanthalloor, the Committee wants to know whether the proposed Idukki Package had been implemented including the above two regions with special attention for production, marketing and exporting of their products. So it recommends formulating a strong marketing strategy with special attention for the primary processing of horticultural products. The Committee suggests that some hygiene standard should be preferred for drying of pepper and drying up to that standard could be provided with certain assistance under primary processing. Therefore it directs the department to examine the feasibility of including primary processing

(1)	(2)	(3)	(4)
			of agricultural products under the post harvest processing within the prevailing norms of State Horticulture Mission.
20	53	Agriculture	Regarding the assistance for cold storage facility the Committee understood that the farmers were least interested in setting up cold storage as maintenance cost like electricity charges was high. The Committee demands to examine whether electricity charges for operating small scale cold storage could be provided to small scale farmers free of cost.
21	54	„	The Committee urges the department to frame a scheme for monitoring and evaluation of the activities of SHM by engaging the research scholars in the field with scholarship who could implement the scheme as part of their project work.
22	55	„	The Committee directs the department to chalk out a unique time frame programme for the expansion of rural marketing outlets by vegetable and Fruit Promotion Council, Keralam (VFPC).
23	56	„	The Committee concludes that though eight years had elapsed since the constitution of SHM its achievement is far short of the expectance. It reminds that unless the funds released by the Government of India were utilized more effectively, fund allocation for the consecutive years would be reduced. So the department should be more vigilant in the planning and utilization of Central assistance in future.

APPENDIX II

GOVERNMENT OF KERALA

AGRICULTURE (PB) DEPARTMENT

ACTION TAKEN STATEMENT ON THE RECOMMENDATIONS CONTAINED
IN THE REPORT OF THE C & AG FOR THE YEAR ENDED
31-3-2009 (CIVIL)

<i>Sl. No.</i>	<i>Audit Para No.</i>	<i>Recommendation/ Observation</i>	<i>Action Taken</i>
(1)	(2)	(3)	(4)
1	1.1.6	<p>Non Preparation of the State Horticulture Mission Document</p> <p>The State Horticulture Mission Document for the entire Mission period (2005-2012) was not prepared which adversely affected the implementation of the Programmes.</p>	<p>National Horticulture Mission Programme was implemented in the State from 2005-06 onwards. prior to the constitution of SHM in November 2005, the Department of Agriculture prepared the project proposals for NHM for 2005-06. As per G.O. (Rt.) No. 975/05/AD dated 7-7-2005, the Directorate of Agriculture entrusted the Agricultural Finance Corporation, Thiruvananthapuram with the preparation of a detailed project report for Annual Action Plan 2005-06 for the development of horticultural crops in the state for approval of Government of India. The report submitted by the Agricultural Finance Corporation (AFC), was approved by the Government of India with minor modifications made by M/s. Global Agri System, New Delhi. The State Horticulture Mission started implementing the programme as per the approved Annual Action Plan.</p>

(1)	(2)	(3)	(4)
			<p>Hence, details of any baseline survey conducted on the status of horticultural crops prior to the commencement of the Mission activities in 2005-06, method adopted for preparation of Annual Action Plan, "State Horticulture Mission document" projecting the plan of action for the 10th and 11th plan, and details of any study or document relied on for formulation of action plan for implementing Mission schemes in the State are not available with the State Horticulture Mission.</p> <p>Secondary data available with Department of Economics and Statistics and market survey conducted by various organizations was relied upon for preparation of action plan.</p> <p>There is no accepted methodology for collecting horticulture statistics in the Country. However to overcome this, NHM has sanctioned a pilot project for conducting detailed horticulture census in two districts of three States, in which Kerala is also included. The study will be conducted during 2011-12 agricultural season by the Department of Economics and Statistics, Government of Kerala.</p>
2	1.1.7	<p>Deficiencies in preparation of Annual Action Plans The Annual Action Plans for 2005-06 to 2007-08 were prepared without involvement of district/field level officers. Technical Support Group was also not constituted despite allocation of funds.</p>	<p>Annual Action Plan 2005-06 was prepared by the Directorate of Agriculture, through the Agriculture Finance Corporation. AAP for 2006-07 was prepared after discussion with the Deputy Directors of Agriculture (H) of the districts over telephone. Before preparation of AAP 2007-08, a State Level workshop was conducted by SHM, which was</p>

(1)	(2)	(3)	(4)
			<p>attended by the Principal Agricultural Officers and the Deputy Directors of Agriculture (H) of the districts and the AAP was prepared based on their requirements. From 2008-09 onwards, the AAP is being prepared after conducting District Level workshops which are attended by the various stakeholders of SHM.</p> <p>During 2008-09, actual fund received was ₹ 77.17 crore (₹ 11.27 crore was received only in April 2009). As such, funds released to District Horticulture Missions (DHM)/Implementing agencies was 57 % of the fund received and not 50% as stated in the para.</p> <p>The percentage of release of funds to District Horticulture Missions (DHM)/Implementing agencies during the four years is as under:</p> <p>2005-06 .. 10.9 %</p> <p>2006-07 .. 86.7 %</p> <p>2007-08 .. 99 %</p> <p>2008-09 .. 57 %</p> <p>Hence, the release of fund was not low, especially during 2006-07 and 2007-08. The projects would be on various stages of completion and finally the released fund is treated as expenditure on receipt of utilization certificate from the concerned party.</p> <p>In the absence of Technical Support Group (TSG), a Project Appraisal Committee was functioning in the office of the SHM comprising</p>

(1)	(2)	(3)	(4)
			<p>DR. S. R. Nair, Professor of Horticulture (Rtd.), Kerala Agricultural University, Dr. Rajendran, Scientist (Rtd.), Central Tuber Crops Research Institute and Dr. Philipose Joshua, Professor of Processing Technology, Kerala Agricultural University for evaluation of projects. Since the group was not effective, it was decided that evaluation will be done by a Committee consisting of Joint Directors of Agriculture and Project Officers who have sufficient experience in the field along with field consultants who are all Graduates/Postgraduates in Agriculture. Those projects requiring more evaluation were forwarded to PPM cell for evaluation. However, in the light of the observation of the Performance Audit team, a TSG was constituted during January 2010, which has been functioning effectively since then.</p>
3.	1.1.8.1	<p>Low utilization of Government of India Funds Failure of the SHM to utilize the original allotment resulted in non release of ₹ 367.99 crore for SHM activities. Out of ₹ 267.90 crore released to the SHM during 2005-09, ₹ 112.34 crore remain unutilized. Further, there is a non release of ₹ 7.85 crore towards State share during 2007-09.</p>	<p>The Mission started functioning in November 2005. Only five months time was there for the Mission to implement the schemes for 2005-06. The unspent balance of ₹ 33.64 crore during 2005-06 has reflected in all the subsequent years, leading to 42% non-utilization at the end of 2008-09. The unattractive rate of assistance for many of the components also contributed to the low utilization of funds. Moreover, dearth of staff is another reason for delay in implementation of schemes.</p>

(1)	(2)	(3)	(4)
			A major portion of the unspent balance of ₹ 112.34 crore has been expended during 2009-10, leaving a balance of ₹ 11.96 crore on 31-3-2010. This amount also has been utilized completely by May 2010. The question of releasing an amount of ₹ 7.85 crore is being considered. Interest accrued up to 31-3-2010 amounting to ₹ 14.40 crore approximately has been adjusted against the release for 2010-11.
4	1.1.8.2	Finalisation of Annual Accounts	Annual Accounts for the period up to 2008-09 has been finalized and approved by the Executive Committee and Governing Body of the State Horticulture Mission. Copies of the Accounts were sent to National Horticulture Mission also.
		The SHM was required to furnish audited accounts and utilization certificates, the GOI immediately after the close of each financial year. However audit found that the annual accounts for 2006-2007 and 2007-2008 had not been approved also September 2009 by the Governing Body.	
5	1.1.9	Implementation of Schemes	
		The main objectives of the SHM was to provide holistic growth through the implementation of schemes like vegetable seed production, establishment of new nurseries, establishment of new garden etc. Audit has found that there are many short falls in the implementation of the schemes by SHM.	

(1)	(2)	(3)	(4)
6	1.1.9.1	Seed Infrastructure	Work on seed infrastructure at Kerala Agricultural University has been completed and is fully functional. The Kerala Agricultural University is being requested to address all the pending issues related to Seed License. The SHM has also taken up the matter with the University.
7	1.1.9.2	Implementation of Schemes Establishment of Nurseries	<p>Now MoU is being executed between nurseries and District Horticulture Mission.</p> <p>Strict directions have been given to all concerned to observe the NHM guidelines. Moreover, sanction for nurseries as per the delegation of powers by NHM is now vested with SHM-EC, and hence, the area stipulation is being strictly adhered to.</p> <p>As per the original guidelines of NHM, assistance was provided for nurseries of annual and seasonal crops like banana, turmeric and ginger. Accordingly, sanction was accorded from DHMs for establishing such nurseries. However these nurseries could not be run for long periods since the land was on lease. While issuing Guidelines, NHM was also not aware of this issue. Later on this fact was noticed by NHM and NHM stopped providing assistance for nurseries of banana from 2008-09 onwards.</p> <p>Now, as per revised guidelines of NHM effective from 2010-11,</p>

(1)	(2)	(3)	(4)
			<p>no assistance is being provided for nurseries of annual and seasonal crops like turmeric and ginger also.</p> <p>Strict directions were given not to split nurseries. But in some districts this was not followed. Due to shortage of staff this could not be monitored. However, the observation is noted for future guidance. Moreover, sanction for nurseries as per the delegation of powers by NHM is now vested with SHM-EC, and hence, the area stipulation is being strictly adhered to.</p> <p>Strict directions have been given to all concerned to produce the stipulated number of planting materials in the nurseries assisted by NHM.</p> <p>Since pepper rejuvenation programme was being implemented in Idukki during the said period, there was great demand for pepper cuttings and in order to cater to this need, model nursery of pepper was also sanctioned to the farm, in good faith. However, based on the audit observation, strict directions have been issued from SHM-headquarters not to repeat this in future.</p> <p>The district level committees are functioning properly now as per the direction from SHM-HQ. NHM has now issued directions to accredit the nurseries being established with assistance from NHM.</p> <p>NHM has now issued directions to accredit the nurseries being established with assistance from NHM. National</p>

(1)	(2)	(3)	(4)
8	1.1.9.3	<p>Implementation of Schemes Tissue Culture in Pineapple</p> <p>₹ 6.00 lakh released to two nurseries for tissue culture in pineapple did not serve the intended purpose.</p>	<p>Horticulture Board is the accreditation agency. Accordingly, action has been initiated to accredit the nurseries being established from 2010-11 onwards with NHB.</p> <p>NHM is providing assistance for renovation of tissue culture labs during every year. Moreover, assistance is being provided for establishing new TC labs from 2010-2011 onwards. The plantlets being produced in these labs can be hardened in the nurseries established under NHM. Hence, the full capacity of these nurseries can be utilized in future. The SHM however, is being asked to examine the circumstances that led to the release of the subsidy amount without ensuring adequate infrastructure facilities.</p>
9	1.1.9.4	<p>Implementation of Schemes Establishment of New Gardens</p> <p>There is an excess payment of assistance of ₹ 2.16 crore to Ginger and turmeric crops. It is also found that there was non payment of assistance of ₹ 51.81 lakh toward pepper cultivation. Despite spending ₹ 33.61 crore to expand the area under cultivation of five major crops, the production and productivity declined in 2007-08 except for turmeric.</p>	<p>The guidelines of NHM was prepared based on the practices followed all over the country and not particularly to the State of Kerala. The constraint of annual cultivation of banana in the State was brought to the notice of NHM and NHM has revised the guidelines during 2010, whereby assistance is now provided over a period of two years. In respect of ginger and turmeric, as per the approved annual action plan of the concerned years, assistance is provided for one year only and not for three years. As per revised guidelines of NHM also, assistance for spices and rhizomatic spices like ginger and turmeric, assistance is provided for one year only.</p>

(1)	(2)	(3)	(4)
			<p>Based on the observation of audit, provision was made in the action plan for 2010-11 for providing assistance to pineapple cultivation during second and third years.</p> <p>As per the approved annual action plan of the concerned years, the entire assistance for ginger and turmeric is to be provided for one year only and not over a period of three years. Hence, the audit observation that this resulted in excess payment of ₹ 2.16 crore is not correct.</p> <p>Non-payment of assistance of ₹ 51.81 lakh towards pepper cultivation</p> <p>Farmers are not willing to come forward for collection subsidy for 2nd and 3rd years since the assistance is meagre.</p> <p>Impact of the Scheme</p> <p>In Kerala, the pressure on land for developmental activities is escalating and agricultural land is being converted for other activities. Due to State Horticulture Mission's intervention, the acceleration of conversion could be slowed down and the decline in area could be held at 2.58 lakh hectares. A large number of farmers of Kerala do not depend on agriculture for their main livelihood but practice weekend farming. Due to State Horticulture Mission's intervention, the decrease in productivity could be held at the present level. During 2003-2006 period, the price fluctuations in the global market caused severe loss to farmers resulting in farmers' suicides.</p>

(1)	(2)	(3)	(4)
			<p>In order to help these farmers, the three districts of Palakkad, Wayanad and Kasargod were declared as suicide prone districts and included in the Prime Minister's Package for distress affected farmers. Due to the interventions of State Horticulture Mission, no such cases of suicide have been reported in these districts.</p> <p>Moreover, the Real Estate business thriving in the State treats the land as a commodity rather than as an input for production. In such circumstances, the intervention of SHM has helped to sustain horticulture sector in the State to a certain extent.</p> <p>Based on the enquiries received in the SHM-HQ, it can be deduced that NHM has created stimulation among the agricultural entrepreneurs of the State.</p> <p>The audit observation is duly taken not of. The SHM is being asked to strictly follow the same in the planning and implementation of schemes.</p> <p>In the XX Executive Committee held on 24-6-2010, the guidelines of SHM were modified so that District Horticulture Missions could purchase inputs like Vermicompost, Bio control agents like Pseudomonas and Trichoderma and planting materials produced by State Horticulture Mission funded labs/nurseries under public and private sector for supply to NHM beneficiaries. Accordingly, sanction was accorded to the District Horticulture Missions to purchase</p>
10.	1.1.9.5	<p>Implementation of Schemes Rejuvenation/ Replacement of Senile plantations and un-productive use of funds</p>	
		<p>Production of pepper in Idukki and Wayanad declined despite spending ₹ 34.46 crore.</p>	

(1)	(2)	(3)	(4)
			<p>inputs like Vermicompost, Pseudomonas, Trichoderma and planting materials produced by State Horticulture Mission funded labs/nurseries under public and private sector for supply to NHM beneficiaries.</p> <p>When the above order was issued, the Agro Bio Input Manufacturers Association of Kerala represented to State Horticulture Mission to include nine members in their association as approved suppliers of bio-control agents viz., Pseudomonas and Trichoderma for NHM programme, since the bio-control agents produced by SHM funded labs alone cannot cater to the demand of the farming community of Kerala. Similarly, a few other agencies had also requested to include their firm as approved suppliers of bio-control agents for NHM programme. Taking into consideration these requests, the earlier order was modified with the approval of the Chairman, Governing Body on 31-8-2010 whereby sanction was accorded to the District Horticulture Missions to purchase inputs like bio-control agents, Vermicompost, planting materials, etc. from State Horticulture Mission funded units under public and private sector/PSUs/firms and dealers approved and licensed by Department of Agriculture for supply to NHM beneficiaries. Further, farmers have again been given the freedom to purchase inputs like fertilizers, organic manures, bio-control agents,</p>

(1)	(2)	(3)	(4)
11. 1.1.9.6	Implementation of Schemes Organic Farming	Assistance of ₹ 2.44 crore was sanctioned for cultivation of organic products in violation of NHM guidelines. Out of ₹ 17.50 lakh released to NAPCL for organic farming, ₹ 7.76 lakh was retained without utilization	<p>shade nets, green house materials, etc. from any dealer of their choice, provided the inputs are of good quality, for implementing NHM programme.</p> <p>The rate of assistance mentioned in the audit para pertains to the rate for organic certification and not to adoption of organic farming. The rate of assistance for adoption of organic farming as per NHM guidelines (before May 2009) is ₹ 10,000 per ha. subject to a limit of 4 ha per beneficiary. The assistance of ₹ 2.44 crore was disbursed to farmers for adoption of organic farming in 2419 ha, which is admissible as per the guidelines. Hence the payment is in order.</p> <p>The practice followed in Wayanad is being adopted in the other districts also with the active participation of NGOs functioning in the agriculture sector.</p> <p>NAPC has refunded the unutilized amount of ₹ 7.76 lakh to SHM.</p>
12 1.1.9.7	Implementation of Schemes Establishment of bio-control laboratories	Bio-control Laboratories at Idukki and Thiruvananthapuram were not set-up despite release of ₹ 88.35 lakh.	<p>The annual requirement of bio-control agents in the State is roughly estimated to be more than 1500 MT/year.</p> <p>The construction of biocontrol lab at Cardamom Research Station, Pampadumpara has been completed and the one at College of Agriculture, Vellayani is progressing and will be completed by December 2010.</p> <p>Principal Agricultural Officers have been directed to strictly follow the instructions issued from SHM-HQ regarding purchase of bio-control agents from the SHM assisted laboratories.</p>

(1)	(2)	(3)	(4)
13	1.1.9.8	<p>Implementation of Schemes Distribution of Subsidy</p> <p>It is found that there is a delay of 3 to 12 months in the disbursement of subsidy in 12 Krishi Bhavans where test audit was conducted.</p>	<p>The SHM is being asked to address the issue and to disburse the subsidy timely among the eligible farmers.</p>
14	1.1.9.9	<p>Implementation of Schemes Marketing Infrastructure</p> <p>Construction of buildings was completed only in seven rural markets out of 22 by VFPCCK.</p>	<p>All the 22 buildings for rural markets has since been completed by VFPCCK.</p> <p>SHM has sanctioned four markets to Idukki during 2009-10 and 2010-11, which are not under VFPCCK. Since the rate of assistance for Post harvest management has been enhanced from 25% to 40 % in general areas and from 33% to 55% in hilly and backward areas, there is a positive shift in the part of stakeholders for taking up such ventures.</p> <p>Since, the rate of assistance for Post harvest management has been enhanced from 25% to 40% in general areas and from 33 % to 55 % in hilly and backward areas, there is a positive shift in the part of stakeholders for taking up such ventures.</p>
15	1.1.9.10	<p>Implementation of Schemes Post harvest management</p> <p>Subsidy of ₹ 3.25 crore for post harvest management was not utilized.</p>	<p>Anticipating proposals for Post harvest management from various stakeholders, provision was made in the Annual Action Plan. But since the rate of assistance was meagre, no proposal was received. But in the light of enhanced assistance by NHM from 2010-11 onwards, two proposals have already been received. Many more enquiries are also being received.</p>

(1)	(2)	(3)	(4)
16.	1.1.10	<p data-bbox="486 526 742 593">Monitoring and Evaluation</p> <p data-bbox="486 604 742 705">The Monitoring and Evaluation System in the SHM was inadequate.</p>	<p data-bbox="758 526 1251 1377">A Technical Support Group was constituted during January 2010, which is functioning effectively since then. Concurrent evaluation of SHM programmes is being carried out at present by the Centre for Management Development, Thiruvananthapuram. The monthly progress report of NHM programme is collected by SHM and compiled, monitored and evaluated. SHM has been and is conducting review meetings of the Deputy Directors of Agriculture (H) of all districts at least once in three months to monitor and evaluate the activities. Moreover audit of the activities is done by the internal audit wing of SHM. The Joint Directors and Project Officers in charge of the north and south region visit all districts to monitor and evaluate the programme. The Mission Director attends the monthly plan review meeting conducted by the Department of Agriculture, thus monitoring the scheme at the State level.</p> <p data-bbox="758 1388 1251 1489">Directions have been issued to DHMS to collect block level progress reports, which is being complied.</p> <p data-bbox="758 1500 1251 1601">Directions have been issued to the concerned agencies to furnish monthly progress reports.</p> <p data-bbox="758 1612 1251 1740">All efforts have been taken for effective Monitoring and evaluation of the scheme with the existing staff in the SHM.</p>