

CHAPTER - I

PERFORMANCE REVIEW

PLANNING AND PROGRAMME IMPLEMENTATION DEPARTMENT

1.1 BAMBOO FLOWERING AND FAMINE COMBAT SCHEME (BAFFACOS)

Highlights

Mizoram has rich bamboo forests which covers about 6,447 sq km occupying 31 *per cent* of the total area (21,087 sq km) of the State. When the flowering is synchronous over the vast tracts to varying extent, the phenomenon is called gregarious flowering. Due to gregarious flowering, periodic rodent outbreaks (rapid multiplication of rat population within a short period) are caused, which devastates the jhum cultivation at the harvesting time causing famine. To combat the problems arising out of gregarious flowering of bamboo, the State Government introduced (August 2004) 'Bamboo Flowering and Famine Combat Scheme' (BAFFACOS). A performance review of BAFFACOS revealed shortcomings in the planning with no approved centralised objectives for the scheme. Different activities formulated and implemented by various Departments were neither related to utilisation of bamboo nor concentrated on population affected by bamboo flowering. There was no co-ordination amongst different Departments and activities were implemented in a standalone mode resulting in wastage, misuse, diversion of funds and creation of idle assets. Allocation of funds was done in an adhoc manner without any prioritisation of activities. The monitoring systems were found to be inadequate due to lack of regular flow of information to the Nodal Department and absence of field inspections. BAFFACOS did not address the core issue of utilisation of bamboo resources and providing livelihood to affected families.

Significant audit findings are given below:

BAFFACOS consisted of multiple activities of various Departments and as such there were no centralised objectives and role of different Departments for carrying out identified activities were not clearly spelt out.

(Paragraph-1.1.8)

The funds for implementation of BAFFACOS were allocated to 15 implementing Departments. The allocation was done in an *ad hoc* manner without any prioritisation of activities.

(Paragraph-1.1.9.1)

The Environment and Forest Department did not extract the bamboos before flowering, thereby, creating conditions for rodent menace and subsequent destruction of crops. As a result, the State Government sustained a loss estimated at Rs.226 crore during 2005-08.

(Paragraph-1.1.10.2)

During 2007-08, rats damaged jhum paddy, vegetables, fruits and rice cultivation in the low lying area to the tune of almost 82.88 *per cent* in spite of bounty payment amounting to Rs.29.65 lakh for 15.10 lakh rat tails during 2006 and 2007.

(Paragraph-1.1.10.3)

Test check of ten implementing Departments revealed spending of Rs.23.08 crore on creation of idle assets, wastages, misuse of funds diversion of fund and doubtful expenditure.

(Paragraph-1.1.9.2, 1.1.10.4, and 1.1.10.6)

One of the activities of BAFFACOS was adoption of alternative and diversified cropping system in place of jhum cultivation, but the area under jhum cultivation in the State increased by 10 *per cent* from 40,969 hectares in 2004-05 to 44,947 hectares in 2008-09, indicating ineffective implementation of the scheme.

(Paragraph-1.1.10.7)

Monitoring of the programme was lax and evaluation was never attempted during the period covered under audit.

(Paragraph-1.1.11)

1.1.1 Introduction

Mizoram has rich bamboo forests which covers about 6,447 sq km occupying 31 *per cent* of the total area (21,087 sq km) of the State. There are more than 20 species of bamboo covering nine genera, out of which *Melocanna baccifera* (Mautak) constitutes more than 95 *per cent* of the growing stock of bamboo. When the flowering is synchronous over the vast tracts to varying extent, the phenomenon is called gregarious flowering. In case of *Melocanna Baccifera* (Mautak), the flowering cycle in the State has been recorded to be around 48 years (1910-1912, 1958-59 and 2007-08). Such a peculiar behavior of bamboo often creates ecological and socio-economic problems (like dying of all bamboo plantations, increase in rodent population, famine, etc.) in the State. The gregarious flowering of bamboo during 1958-59 and its aftermath famine situation contributed to the separatist movements in Mizoram during 1960s to mid 1980s.

Periodic rodent outbreaks (rapid multiplication of rat population within a short period) in Mizoram are caused by gregarious bamboo flowering. There is little agreement as to how the two are linked as no scientific evidence to support any particular view on this exist. The rodent outbreak devastates the jhum cultivation at the harvesting time causing famine.



1.1.2 Immediate effects of gregarious flowering and BAFFACOS

The gregarious flowering results in -

- Sudden availability of huge stockpile of dry bamboo – a big fire hazard;
- Explosion in rodent population due to availability of excess food in the form of bamboo seeds/ fruits;
- Sudden shortage of bamboo fruits/ seeds due to germination that results in rodents feeding on agricultural crops;
- Shortage of food for the people;
- The people, dependant on bamboo for livelihood, is deprived of the source materials; and
- Possibilities of outbreak of an epidemic.

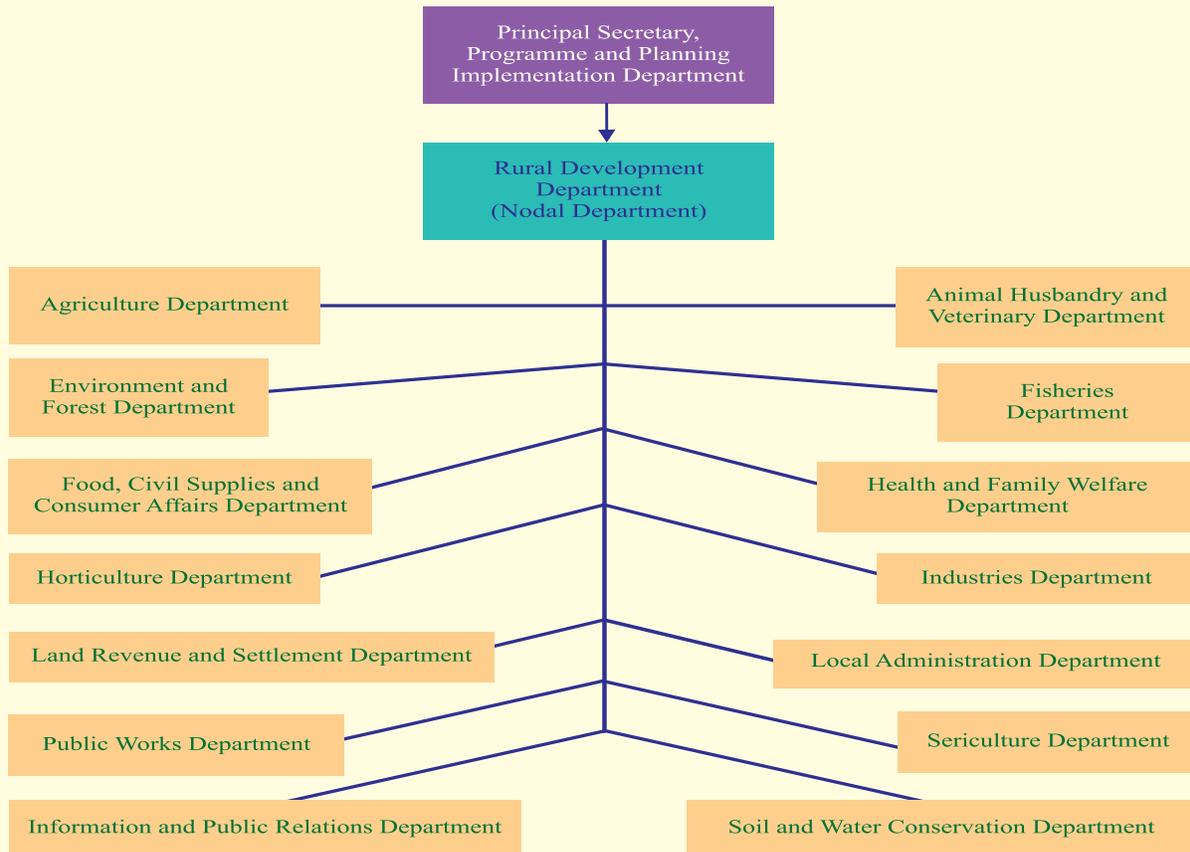
Keeping the above points in view, and to address the affects of gregarious flowering in the State along with making efforts to encourage people to adopt diversified cropping system as alternative means of livelihood, etc. the State Government formulated (August 2004) comprehensive programme called Bamboo Flowering and Famine Combat Scheme (BAFFACOS).

1.1.3 Organisational Set up

The Principal Secretary, Government of Mizoram, Programme and Planning Implementation (P&PI) Department was overall incharge in the State to over see the implementation of the scheme. Under the P&PI Department, a State Planning Board (SPB) was functioning as Nodal Agency upto September 2006. However, from October 2006 the responsibilities of Nodal Agency/Department was shifted to Rural Development Department. There were 15 Departments¹ in the State who were associated in implementation of BAFFACOS in the State during 2004-08. The organisational set up is given in the chart below:

¹ (i) Agriculture, (ii) Animal Husbandry and Veterinary, (iii) Fisheries, (iv) Food, Civil Supplies and Consumer Affairs, (v) Environment and Forest, (vi) Horticulture, (vii) Health and Family Welfare, (viii) Industries, (ix) Information and Public Relations, (x) Land Revenue and Settlement, (xi) Local Administration Department, (xii) Public Works Department, (xiii) Rural Development Department, (xiv) Sericulture and (xv) Soil and Water Conservation Department

Chart - I



1.1.4 Scope of Audit

BAFFACOS was implemented in the State during the years 2004-05 to 2007-08. The performance audit of BAFFACOS was conducted during May-July 2009. The records of the Planning and Programme Implementation Department, Rural Development Department (Nodal Department) and ten² out of 15 implementing Departments (67 per cent) were test checked in audit. The Departments were selected for test check on judgement sampling basis. There were no activities under the scheme during 2008-09.

1.1.5 Audit Objectives

The performance audit was conducted to assess whether –

² (i) Animal Husbandry and Veterinary Department, (ii) Fisheries Department, (iii) Food, Civil Supplies and Consumer Affairs Department, (iv) Horticulture Department, (v) Industries Department, (vi) Information and Public Relations Department, (vii) Local Administration Department, (viii) Public Works Department, (ix) Rural Development Department and (x) Sericulture Department

- The proposed mitigation strategy and action points for the various agencies were implemented timely and with due regard to economy, efficiency and effectiveness;
- Funds were utilised for defined purposes; and
- Effective monitoring of the proposed mitigation strategy and action points for the various agencies took place.

1.1.6 Audit Criteria

Audit Criteria were derived from :

- Programme guidelines issued by the Ministry of Environment and Forest (MOEF) and the State Government;
- Circulars/ notifications issued by the Government having a bearing on programme implementation; and
- Prescribed monitoring mechanism.

1.1.7 Audit Methodology

The performance audit commenced with an entry conference with the representatives of the State Planning Board in May 2009 in which the audit methodology, scope, objectives and criteria were firmed up. The audit methodology consisted of analysis of documents. Selection of Departments was done on judgmental sampling basis. The audit findings were discussed in exit conference held with the representatives of the State Government in September 2009 and replies of the Departments have been incorporated suitably in the review at the appropriate places.

Audit Findings

The important points noticed in the course of audit are discussed in the succeeding paragraphs.

1.1.8 Planning

The Ministry of Environment and Forests (MOEF), Government of India in 2004 had proposed an Action Plan to deal with the problem of gregarious flowering of Muli Bamboo in the North East to be implemented during the years 2005-06 to 2008-09 for extraction of bamboo before flowering, regeneration of flowered areas, rodent control managements, strengthening of Public Distribution System in view of expected rodent menace etc. In Mizoram, the State Environment and Forest Department (SEFD) which

is responsible for raising and maintaining bamboo plantation was not involved in the entire planning process. Action Plan was formulated by individual Departments and consolidated into Comprehensive Action Plan (CAP) for BAFFACOS for the year 2004-05 to 2008-09 involving Rs.566.55 crore which was submitted (October 2004) to the Planning Commission by the State Planning Board. The Government of India neither approved nor sanctioned this CAP. The State Government, however, provided Rs.125 crore under one time Additional Central Assistance (ACA) (Rs.85 crore) and Twelfth Finance Commission (TFC) (Rs.40 crore) for implementation of BAFFACOS. The entire amount of Rs.125 crore was spent by the State Government without giving any importance to the core activities of the BAFFACOS.

There were no approved centralised objectives under BAFFACOS but different activities as formulated by various Departments were identified comprising of -

- Public Awareness Campaign (Information and Public Relations Department),
- Survey and mapping of bamboo, Regeneration of bamboo, Extraction of bamboo, Utilisation of extracted bamboo (Environment and Forest Department),
- Land survey (Land Revenue and Settlement Department),
- Construction of Bamboo Link Road (Rural Development Department and Public Works Department),
- Establishment of processing unit at village level (Industries Department),
- Rodent control (Agriculture Department),
- Alternative and diversified cropping system (Agriculture Department),
- Alternative means of livelihood – mulberry farming, fish pond, livestock rearing etc. in place of jhum farming (Sericulture, Fisheries and Animal Husbandry and Veterinary Department),
- Rural market connectivity (Rural Development Department),
- Employment generation (Rural Development Department), and
- Food support (Food, Civil Supplies and Consumer Affairs Department).

1.1.8.1 Inadequate Planning

The basic inadequacy of planning under BAFFACOS was that even though activities were identified but role of different Departments for carrying out these activities for fulfilling the objectives were not clearly identified leading to wastage in implementation.

There was no plan by the State Government for carrying out some of the vital activities identified by MOEF viz. vulnerability risk assessment, preparation of vulnerability reduction plan, Geographical Information System mapping of vulnerable forest areas, capacity building of implementing Departments, creation of Hazard Safety Cell for control of fire hazard, development of disaster management frameworks etc. Plan and policy for disaster management were merely perfunctory and inadequate and were more in the nature of form rather than substance.

All the schemes submitted by various Departments to the State Planning Board (SPB) for approval were usually approved without any impact assessment on the development of affected areas and districts. The State level Comprehensive Action Plan formulated by different implementing Departments and approved by the SPB was not based on any block level or district level plans. This indicated the casual approach on the part of the SPB in planning of the scheme.

On these being pointed out by audit, the Advisor SPB admitted (July 2009) that the Action Plan and implementation of BAFFACOS was not up to the mark and the Action Plan was prepared without making any survey and mapping of resources and without identification and grading of all Muli bamboo bearing areas for developmental interventions.

1.1.9 Financial Management

The scheme was funded by the State Government from the award of the 12th Finance Commission (TFC) (Rs.40 crore) and Rs.85 crore from the Additional Central Assistance (ACA). The entire amount (Rs.125 crore) was allocated to the 15 implementing Departments of the State. Neither the State Finance Department nor the State Planning Board (SPB) could furnish the basis for apportionment of fund to the implementing Departments.

1.1.9.1 Financial Outlay and expenditure

Scrutiny of the records related to 15 implementing Departments revealed that the entire amount (Rs.125 crore) was spent during 2004-08 for implementation of the scheme, as given in Appendix – 1.1.

It would be seen from Appendix - 1.1:

- The amount proposed by the Department in their CAP could not be allocated to them as the entire amount sought under CAP was not available. The money was sanctioned to different Departments on basis of individual proposal in an adhoc manner without prioritization of activities. As would be seen subsequently in the Report that activities pertaining to the SEFD viz. Construction of Bamboo Link Road was taken up by

Departments like Rural Development and the Public Works Department without any consultation with the SEFD. Similarly funds for a number of activities not related to the BAFFACOS at all were sanctioned (discussed in paragraphs 1.1.10.3 and 1.1.10.6).

In the Exit Conference held in September 2009, the State Government stated that allocation of fund to the different implementing Departments was made based on CAP and on the basis of limited availability of funds. The contention was not correct as would be seen from the Appendix – 1.1 that no rationale was given while sanctioning the funds. For example, the Environment and Forest Department, whose main activities were centered around generation and extraction of bamboo in the State was given only Rs.9.64 crore (8 *per cent*). Similarly, the Agriculture Department, Health and Family Welfare Department and Food and Civil Supplies Department were given Rs.4.97 crore, Rs.2.90 crore and Rs.3.98 crore representing 4 *per cent*, 2 *per cent* and 3 *per cent* respectively of the total allocation of Rs.125 crore.

1.1.9.2 Wasteful expenditure

(a) Mention regarding unauthorised disbursement of Rs.2.80 crore from BAFFACOS fund as loan to M/s Mizoram Venus Bamboo Products (MVBP) Limited, Aizawl was made in paragraph 7.2.15 of the Audit Report for the year ended 31 March 2008. It was further noticed in audit that –

M/s MVBP Limited, Aizawl had not utilised the amount for manufacturing any bamboo product in the State, and the Industries Department had not taken any action or preferred any claim for recovery of Rs.20 lakh as penal interest from the said loanee mainly because of its failure to execute a formal agreement with the loanee. No legal action against the loanee to recover the loan also could be initiated. In September 2009, the Department stated that an enquiry was under – way and also confirmed that no legal action was initiated for recovery. Results of the enquiry have not been received (November 2009).

(b) In 2006-07 the Industries Department paid Rs.60.10 lakh as term loan to two Aizawl based firm³ for manufacturing of bamboo sticks against their project cost of Rupees one crore. But after disbursement of Rs.60.10 lakh, no further loan was given to these firms. Consequently, the projects remained incomplete rendering the whole investment of Rs.60.10 lakh wasteful.

Besides, the Department could not recover loan of Rs.60.10 lakh from these two units as of 31 March 2009, due to non execution of formal agreement before disbursement of loan. The Department could neither recover the amount nor initiate any legal action against the defaulting firms and the entire investment of Rs.60.10 lakh proved wasteful.

³ M/s R.P. Bamboo Industries Limited, Aizawl and M/s L.Z. Bamboo Industry Limited, Aizawl

1.1.10 Programme Implementation

Audit findings in respect of implementation of the BAFFACOS are discussed in the succeeding paragraphs.

1.1.10.1 Identification of Beneficiaries

For effective implementation of the scheme, field level survey in affected areas was necessary to identify, (i) mapping of bamboo (ii) extraction of bamboo before it was destroyed due to bamboo flowering (iii) regeneration of bamboo (iv) construction of rural link roads in bamboo areas and (iv) alternative means of livelihood in place of jhum farming. As discussed in paragraph No. 1.1.8.2, none of the Implementing Departments identified their proposed activities after conducting village level, block level and district level survey and as a result instead of concentrating their activities on generation/ regeneration, optimal extraction and utilisation of bamboo for value addition to create permanent income generating schemes for the affected rural people/remote areas, the funds for BAFFACOS were spent for creation of assets, which were not even utilised (*viz.* Industrial Estate, Ropeways, Digital Weigh Bridge, staff quarters etc.) as discussed in the succeeding paragraphs.

(a) To provide sustained generation of income, beneficiaries were to be identified from the remote areas who were affected by the gregarious flowering. To combat famine, adequate emphasis was also to be laid on Schemes for employment generation and production oriented activities in remote areas for the benefit of the rural poor. However, it was noticed in the audit that:-

The activities of the Animal Husbandry and Veterinary Department under BAFFACOS was not extended in a larger way to the far flung districts like Saiha, Serchhip, Mamit and Lawngtlai covering the actual beneficiaries. Rather it was confined around the capital and district Headquarters like Aizawl, Lunglei, Champhai, and Kolasib which indicates the failure of the Department to implement the scheme in a purposeful and meaningful manner, thereby negating the objective of the scheme.

Further, the implementing Departments did not maintain the basic records showing details of employment generated from BAFFACOS fund during 2004-08; the increase in production of various goods and services and increase in average income of the beneficiaries concerned. Due to failure in maintenance of basic records, the end-result of the scheme

remained unascertainable in audit. The Government admitted (April 2006) that schemes under BAFFACOS were taken up for beneficiaries residing in Aizawl and other district headquarters although as per the guidelines schemes should cover beneficiaries living in remote areas. During the exit conference held in September 2009, the Department also conceded the lapses.

(b) All the beneficiaries selected under BAFFACOS should be given assistance for the intended purpose for which they were selected. However, it was noticed in audit that there was variation between the district-wise number of beneficiaries as per the approved list and the number of beneficiaries actually covered in the districts under the scheme during 2004-06 as shown in Appendix – 1.2.

It would be seen from the Appendix that variations between approved and actual number of beneficiaries varied between 7 in Kolasib district and 83 in Aizawl district. No recorded reason was available for such wide variation. This obviously led to extension of benefits to ineligible persons thereby depriving the actual beneficiaries, frustrating the prime objective of the scheme. In the exit conference, the Department admitted (September 2009) that some beneficiaries (not quantified) were not entitled for the benefits although total number of beneficiaries remained same, and the modification was done at the apex level thereby denying the benefit to the actual number of beneficiaries of respective districts. Consequently, possibilities of extension of benefits to ineligible/non-existent beneficiaries could not be ruled out and the actual benefits of the scheme did not percolate down to the poor rural people who were actually affected by the famine due to bamboo flowering.

1.1.10.2 Extraction of bamboo and its regeneration

Bamboo constitutes the major portion of forest areas in the State contributing significantly to the revenue generation in the State. As such its optimal extraction of bamboo before flowering was essential for controlling the increase in population of rodents as well as reduction of the adverse impact on the farmers likely to be affected.

The projected average yield of bamboo in the State was 29.86 lakh MT as per Bamboo Resource Inventory of the State (2002). Against the average annual yield of 29.86 lakh MT bamboo, the State Government extracted only 2.36 lakh MT of bamboo during 2005-06 to 2007-08 and earned revenue of Rs.6.11 crore, as per details given in following table:

Table : 1.1

Year	Average annual yield (In lakh MT)	Quantity extracted (In lakh MT) (Figures in brackets indicate percentage of bamboo extracted to average annual yield)	Revenue earned (Rs. in crore)	Quantity remaining un-extracted (In lakh MT)	Loss of revenue @ Rs.2.59 crore per lakh MT (Rs. in crore)
2005-06	29.86	1.19 (4)	3.08	28.67	74.26
2006-07	29.86	0.98 (3)	2.54	28.88	74.80
2007-08	29.86	0.19 (1)	0.49	29.67	76.85
Total	89.58	2.36	6.11	87.22	225.91

Source: Report published by State Agriculture Department (2009).

It would be seen from the above table that:-

(i) Out of total 89.58 lakh MT of bamboo available during 2005-08 a quantity of 87.22 lakh MT of bamboo could not be extracted as a result revenue of Rs.226 crore could not be earned. The percentage of bamboo extracted from the average annual stock during the years 2005-08 constituted only one to four *per cent*. Such poor extraction of bamboo by the SEFD had resulted in a loss to the tune of Rs.226 crore to the State exchequer.

(ii) The quantity of bamboo extracted during 2007-08 decreased by 84 *per cent* over that of 2005-06 and the revenue generation also dropped by 84 *per cent* during the same period. Information for subsequent period was not available with the Department (November 2009).

No investigation was made by the SEFD to ascertain reasons for steep decline in extraction of bamboo during the aforesaid years. Moreover, the Department had also not maintained records showing the numbers/quantities of bamboo extracted in earlier years to assess the affect of flowering in extraction of bamboo. Had all the bamboo extracted before their flowering, the menace of increase in rat population could have been contained to a large extent.

In the Exit Conference (September 2009) the Forest Department stated that all the bamboo could not be extracted because its ultimate usage was limited due to limited intake capacity of Paper Mill at Cachar (Assam), and the extraction was hindered due to constraints of usage and storage of bamboo. The State Government had not considered the feasibility of setting up bamboo-chipping units/ paper mills in the State for effective and optimal utilization of bamboo which if established, could ease the situation better.

No special effort was also taken by the Forest Department to regenerate bamboo in the affected areas. The Department had also not taken any action to raise plantations of different bamboo species having different flowering cycles to avoid negative effects of flowering.

1.1.10.3 Rodent Control Measure

Normally, the flowering and fruiting of bamboo does not have any impact on the crops production but when it coincides with the rapid multiplication of rat population within a short period (called rodent outbreak), the bamboo flowering and fruiting becomes a serious phenomenon as it is believed that the rats consume the nutritious bamboo fruits that increases their litter size building and their population during the non-crop season. These rats ultimately devastate the jhum paddy/agricultural crops leading to shortage of foodgrains and causing famine.

It was noticed in audit that to reduce the numbers of rat population, the farmers were encouraged to kill rats as many as possible using both local traps and rodenticides for which huge quantity of different types of rodenticides were distributed to farmers free of cost. Although bounty⁴ payment amounting to Rs.29.65⁵ lakh for 15.10 lakh rat tails was incurred during 2006-07, even then during 2007-08, the rats damaged jhum paddy, vegetables, fruits and rice cultivation in low lying area to the tune of almost 82.88 *per cent* of the total cropping areas in the State. No bounty payment was made thereafter. Thus, even after spending Rs.29.65 lakh the Department could not control the rodent menace effectively in the State.

BOUNTY PAYMENT FOR RAT TAILS



During the months of October and November 2006, a total of 54,030 rat tails were collected from Chhawrtui, Pulo and Dulte villages

⁴ Bounty payment is a kind of payment made for killing rats/rat tails

⁵ Rs.29.65 lakh for 15.10 lakh rat tails (Rs.54,030 @ Rupee one per tail for 54,030 tails in 2006, Rs.29,11,136 @ Rupees two per tail for 14,55,568 rat tails in 2007)

Thus, low allocation of fund of Rs.4.97 crore (4 per cent) as discussed in paragraph No. 1.1.9.1, to the Agriculture Department also contributed significantly to such poor performance in checking rodent control menace. Also, the inaction of the Environment and Forest Department, to extract all the bamboos before the onset of flowering also added to the increase in rat population and damage to crops.

1.1.10.4 Improvement/construction of road network

Improvement/construction of road network in the State to facilitate large scale extraction of bamboo from affected area is one of the important activities under the scheme.

(a) Bamboo Link Roads

Operation of bamboo extraction and their disposal were being carried out only by the State Environment and Forest Department (SEFD). It was, however, noticed in audit that without making any consultation with the SEFD with regard to actual requirement and feasibility, the Rural Development Department (RDD) and Public Works Department (PWD) constructed a few Bamboo Link Roads (BLRs) in various places. The details of BLRs constructed and regularities noticed in course of audit are discussed below:

- (i) The RDD constructed five bamboo link roads⁶ at different places with a length of 34.44 km during 2004-07 at a total expenditure of Rs.2.58 crore. The Department had no records of Measurement Books (MBs) to support the construction of these roads and in the absence of MBs, the actual expenditure incurred for construction of these roads cannot be vouchsafed in audit. Thus, expenditure of Rs.2.58 crore remains doubtful in audit.
- (ii) The RDD drew (March 2005) Rs.1.10 crore in Abstract Contingent (AC) Bill for construction of three bamboo-link roads⁷ and deposited the amount in 8443 – Civil Deposit. In April 2005, the amount was withdrawn from the Treasury and instead of constructing the three link-roads, the Detailed Countersigned Contingent (DCC) Bills in support of the said AC Bill was submitted in May 2005, showing the entire amount of Rs.1.10 crore as spent towards payment of hiring charges of bulldozers for 4,400 hours @ Rs.2,500 per hour. The Department could not produce the log books of the vehicles, MBs and relevant documents in support of the actual execution of the construction works.

⁶ Construction of bamboo link road from (i) Thatkhata kawn to Saisih tlang dung, (ii) Thingdawl to Dilzau, (iii) Bilkhawthlir to Dawrveng to Society Zau, (iv) Thenzawl to Chhiarchhuak ram, and (v) Thatkhata kawn to Mailian Mual under Reiek Rural Development Block

⁷ Bamboo Link Roads : (1) Thingdawl – Dilzau (2) Bilkhawthlir Dawr Veng – Society Zau (3) Thatkhata Kawn Veng – Mailian Mual

In reply to an audit query, the Department stated (May 2009) that estimates were prepared only to get the amount sanctioned from the Government and that the estimates were prepared without carrying out any ground survey to know the actual site condition. In the exit conference, the Department also admitted that there was no consultation with the SEFD for identification of the bamboo link road to be constructed. There was also no clearance from the State Public Works Department for the work to be taken up by the Rural Development Department. The Rural Development Department admitted absence of records like measurement books to support the construction of these roads and attributed the failure to the establishment of a fresh engineering wing of the Department. The possibility of this money having been misappropriated is very high.

- (iii) During 2006-2007, the RDD constructed a bamboo link road under Reiek block on the basis of abundance of bamboo in that place at an expenditure of Rs.20 lakh. The supporting bill included two sub-vouchers each of Rs.20 lakh for the same work, one for clearing jungle by manual means, felling, uprooting and removal of big bamboo clumps and earthwork in excavation including the blasting work and the other, a cash memo of using bulldozer for 800 hours @ Rs.2,500 per hour. The Department could not produce the log books of the bulldozer, MBs and other documents in support of actual execution of the construction works, in the absence of which the expenditure of Rs.20 lakh could not be vouchsafed and possibilities of mis-utilisation of fund could not be ruled out. In the exit conference, the Department admitted (September 2009) that the work was executed through contractor and vouchers for Rs.20 lakh for execution through labour were fictitious and the amount had not been paid. The Department as in preceding case had neither consulted the Forest Department nor obtained clearance from the Public Works Department. The possibility of this money having been misappropriated is very high.
- (iv) Test check of the records of two Public Works Department divisions *viz.* Lunglei and Kolasib revealed that both the divisions constructed Bamboo Link roads (BLR) under BAFFACOS to facilitate the extraction of bamboo before flowering and to promote the regeneration of fresh bamboo in those areas. It was noticed in audit that none of the divisions either conducted any survey for identification of bamboo concentrated areas in the districts or obtained any information on this aspect from the SEFD. The two aforesaid divisions had already constructed five BLR's (three at Lunglei and two at Kolasib) at an expenditure of Rs.1.87 crore. No recorded document was available with these two divisions that these roads were handed over to any user agencies or were

utilised for transportation of bamboo. Thus, the Department incurred the expenditure for construction of the aforesaid roads without ascertaining the effectiveness of its eventual utilisation, thus, frustrating the primary objective behind construction of the roads. In September 2009, the Department conceded the lapses.

(b) Internal Village Roads

The Local Administration Department received (2005-06) Rs.50 lakh for implementation of BAFFACOS. The Department disbursed the entire amount of Rs.50 lakh to four districts (Aizawl: Rs.19.13 lakh, Champhai: Rs.17.84 lakh, Serchhip: Rs.7.38 lakh and Kolasib: Rs.5.65 lakh) for its eventual disbursement to the villagers for construction of internal village roads at 211 selected villages of these districts to enhance the purchasing power of rural poor prior to Christmas. Test check of the records relating to utilisation of fund of Rs.19.13 lakh in Aizawl district revealed that the work was done through the Village Council Presidents (VCPs). The muster-rolls did not contain any measurement of work done nor any date of execution of work. Neither any Measurement Book was maintained nor any completion certificate was available. The Department also did not provide the list of roads constructed. No records also could be furnished in support of utilisation of funds in other three districts⁸ as no follow up action was taken by the Department regarding utilisation of these funds. In the absence of basic records the actual utilisation of the fund could not be vouchsafed in audit. The possibility of this money having been misappropriated is very high.

1.1.10.5 Alternate source of livelihood

As the rural poor people whose agricultural crops were likely to be affected by the rodent menace, it was necessary and prudent that they should be provided with alternate source of livelihood for their sustained generation of income like poultry, piggery etc. Scrutiny of records of the Animal Husbandry and Veterinary Department showed the following:

Supply of healthy and disease free birds and animals are essential for successful implementation of any poultry or piggery scheme.

Scrutiny of the records revealed that the mortality rate of birds and animals distributed to the beneficiaries by the Animal Husbandry and Veterinary Department was very high (56 to 100 per cent in case of birds and 6 to 27 per cent in case of piglets) as is detailed in Appendix – 1.3.

⁸ Champhai, Serchhip and Kolasib

Such high mortality rate of birds and animals had negated the successful implementation of the scheme since the aim of permanent settlement of the beneficiaries by providing them an alternative means of livelihood was frustrated. In September 2008, the Department while admitting the lapses stated that it was beyond the control of the Department. The reply is not accepted in audit, as one of the major reasons for such high mortality was the failure of the Department to impart required training to the selected beneficiaries (comprising of jhum cultivators) for acquainting them in livestock rearing and poultry farming activities. The Department did not make provision for imparting training in 2004-05. During 2005-06 and 2006-07, Rs.1.35 lakh and Rs.0.50 lakh respectively was spent on training, seminar and workshop which was negligible. This is indicative of operational weaknesses in the core activity areas of the Department.

1.1.10.6 Utilisation of funds for other purposes

Funds meant for implementation of BAFFACOS should not, in any case, be utilised for other purposes. It was, however, noticed in audit that while on one hand, the core areas of the scheme (rodent control, regeneration of bamboos etc.) suffered due to low allocation of funds, huge amount was spent, on the other hand, in creation of assets, which were either not related to the scheme or had been lying unutilised resulting in improper/mis-utilisation as discussed below:

- (a) As per the General guidelines of BAFFACOS issued by the Government in September 2004, the schemes fund as far as possible should not be utilised for construction of buildings etc. It was, however, noticed in audit that:
 - (i) Contrary to the guidelines, the Industries Department constructed an Industrial Estate at Bairabi at a total expenditure of Rs.1.15 crore under BAFFACOS. The work was completed in December 2006, but the Industrial Estate had not started functioning (August 2009). No reason could be adduced by the Department for not making the Industrial Estate functional even after a lapse of more than two years. Consequently, the whole investment of Rs.1.15 crore besides being idle did not generate any income or provide any employment opportunity for the past period of over two years. The Department admitted that it was not utilised for the intended purpose.
 - (ii) Similarly, the Director, Food Civil Supplies and Consumers Affairs Department constructed 41 Type II Staff Quarters at different places in the State during the year 2005-06 at a total expenditure of Rs.84 lakh in violation of the guidelines. But even after a lapse of more than four years (2005-09), none of these quarters

was allotted (September 2009) to any staff making the whole expenditure of Rs.84 lakh unproductive and idle.

Besides, due to the failure in allotment of these quarters, the Department sustained a revenue loss of Rs.3.01 lakh towards the recovery of license fees. In September 2009 during Exit Conference, the Department stated that all houses though not allotted, were occupied by officials of the Department. Reasons for not allotting these quarters formally and reasons for failure to recover license fee and payment of avoidable house rent allowance had not been furnished (November 2009).

- (iii) The SEFD constructed one Ropeway during the year 2005-06 at a total expenditure of Rs.10 lakh and incurred a further expenditure of Rs.8 lakh for its extension to facilitate transportation/ retrieval of bamboo at Kawkulh in Champhai district which had not been utilised for transportation of bamboo/ any forest produces. Reasons for non-utilisation of assets were not on records. Consequently, the entire expenditure of Rs.18 lakh, thus, became infructuous.
- (iv) The Environment and Forest Department also installed three digital weigh bridges (at Bairabi and Vairengte in Kolasib district and at Kawrthah in Mamit district) during 2005-07 at an expenditure of Rs.45 lakh for weighing the bamboo exported to Assam and other neighboring States. But none of the weigh bridges had been working (August 2009). Consequently, the entire expenditure of Rs.45 lakh became unproductive and idle. In the Exit Conference, the Department stated (September 2009) that Rope way and digital weigh bridges were likely to be utilised in future. But as the royalty on bamboo is being collected on the basis of number of bamboo, possibility of further utilisation of weigh bridges in future remained far in the anvil. Details of utilisation of Ropeway although called for from the Department, reply has not been provided as of October 2009.
- (b) Funds meant for BAFFACOS are to be spent ideally for combating bamboo flowering and its after affects. However, it was noticed in audit that:
 - (i) The Food, Civil Supplies and Consumers Affairs Department had procured rice from the Food Corporation of India (FCI) for its distribution under the Public Distribution System. It was noticed in audit that during April to June 2007 the Food and Civil Supplies Department purchased 10,872 MTs of rice at a higher rate of Rs.15,970 per MT and sold it to the consumers at a lower rate of Rs.8,300 per MT. As a result, there was a difference

of Rs.8.34 crore⁹ between the purchase price and selling price which was ideally to be borne by the State Government.

But it was noticed in audit that, the Rural Development Department unauthorisedly diverted Rs.8.34 crore from BAFFACOS fund to the Food, Civil Supplies and Consumers Affairs Department for meeting up the aforesaid differential cost. The Department stated (September 2009) that the decision for payment to the Food, Civil Supplies and Consumers Affairs Department was taken at higher level for which no recorded document was available.

Similarly, the Rural Development Department also unauthorisedly diverted Rs.1.57 crore from the BAFFACOS fund for payment of State share for implementation of National Rural Employment Guarantee Scheme (NREGS) during the year 2007-08.

In neither of these two cases, dispensation from the Government of India was obtained (November 2009) and thus, the entire diversion of Rs.9.91 crore was unauthorised. Mobilisation of Central assistance without assessing the actual requirement of funds was the main reason for such unauthorised diversion. During exit conference the Department admitted the lapses.

- (ii) As per the minutes of the Working Group meeting on BAFFACOS (September 2004) the activity under BAFFACOS should be meticulously formulated to ensure that the intended beneficiaries are benefited. The intention of the scheme was to provide a means of generating income to the poor people, who were dependent on agriculture and other allied occupation (like jhumia families) who would face the brunt of rodent menace as all their crops more or less would be destroyed. The Department, however, as per its Action Plan (2005-06) selected 111 beneficiaries¹⁰ of existing Model Piggery Village (MPV) established in different locations of the State for attaining self sufficiency in production of Pork etc. and spent Rs.23.31 lakh towards cost of piglets and feed materials which were issued to the villages, thus, depriving the eligible jhum cultivators under the scheme. The Department, thus, diverted Rs.23.31 lakh from BAFFACOS fund for the benefit of beneficiaries who were already covered under a separate scheme of Non Lapsable Central Pool of Resources (NLCPR). The Department stated in the exit conference (September 2009) that as working capital was not available, money was utilised in Model Piggery Village. The reply effectively admits the diversion of funds.

⁹ 10,872 MTs x Rs.7,670 per MT (Rs.15,970 – Rs.8,300) = Rs.8.34 crore

¹⁰ Aizawl - 30, Champhai - 21, Lunglei - 60

- (iii) The Directorate of Information and Public Relation incurred an expenditure of Rs.21.60 lakh during 2005-06 out of funds provided under BAFFACOS, towards construction and display of Tableau at the Republic Day parade function at New Delhi during 2005 and 2006. In addition, the Department spent an amount of Rs.5.43 lakh¹¹ from BAFFACOS fund towards travel expenses and stay of media personnel invited by the State Government to attend Chapchar-kut festival (2004-05) and organising National Editors Conference on Infrastructural Development (2005-06) at Aizawl. The Department, thus, diverted an amount of Rs.27.03 lakh during 2004-06 for purposes other than those related to Bamboo Flowering. In the exit conference held in September 2009, the Department stated that the expenditure was incurred to educate national and international masses on bamboo flowering and famine, but verification of photographs of tableau by audit showed that these tableau did not depict anything about bamboo flowering and famine.



A view of tableau displayed at Republic Day parade 2006 by Government of Mizoram

- (iv) Out of Rs.62.50 lakh BAFFACOS fund provided to Sericulture Department during 2006-07, Rs.17.50 lakh (28 per cent) was utilised for assistance in the form of mulberry cutting to 1,750 Sericulturists who were already in the trade, and covered under the

¹¹ Rupees four lakh during 2004-05 and Rs.1.43 lakh during 2005-06

normal State Plan budget and other sericulture based programme, thus, utilising the money for unintended benefit. The remaining Rs.45 lakh (72 per cent) was earmarked for cocoon procurement.

1.1.10.7 Impact Assessment

The objectives for implementation of BAFFACOS was to attract and encourage people to practice settled cultivation and wean away jhum (shifting cultivation). However, it was noticed during audit that instead of decreasing, the areas under jhum cultivation increased significantly during the years as shown below:-

- (a) Although one of the main activities of the BAFFACOS was adoption of alternative and diversified cropping system in place of jhum cultivation, the areas under jhum cultivation increased significantly by 10 per cent from 40,969 hectares in 2004-05 to 44,947 hectares in 2007-08, while the number of jhum cultivators also showed marginal increase during the scheme period as can be seen from the table.

Table : 1.2

Year	Total area in the State under paddy	Total area under jhum in ha	Total production of paddy from jhum (in MT)	Total production of paddy in the State (in MT)	Total no. of cultivators	
					in the State	practicing jhum
2004-05	57,085	40,969	64,420	1,07,661	NA	NA
2005-06	56,460	40,100	63,100	1,07,740	NA	NA
2006-07	52,853	41,965	13,568	29,646	88,596	79,849
2007-08	54,541	44,947	11,355	15,688	88,819	79,960

Increase in jhum cultivation indicates ineffective implementation of the scheme and lack in initiative on the part of Government towards adoption of alternative and diversified cropping system.

- (b) The district-wise position of the forest areas affected by bamboo flowering and number of farmers affected by rodent outbreak in the State as of February 2009 is shown in table below:

Table : 1.3

District	Area affected (in ha)			No. of affected farmers by rodent outbreaks (In nos.)	Estimated population of affected areas (2008 survey)
	By Mautak	By Phulrua	Total		
Aizawl	799.00	2,228.30	3,027.30	7,176	3,88,238 (2)
Champhai	430.00	442.50	872.50	2,995	1,16,352 (3)
Kolasib	0	11,045.00	11,045.00	614	82,666 (1)
Lawngtlai	0	923.00	923.00	2,950	68,697 (4)
Lunglei	676.83	2,520.93	3,197.76	7,756	1,64,977 (5)
Mamit	287.55	3,195.00	3,482.55	7,614	85,547 (9)
Saiha	3,040.00	542.00	3,582.00	2,326	48,418 (5)
Serchhip	35,540.00	7,108.00	42,648.00	3,490	67,477 (5)
Total	40,773.38	28,004.73	68,778.11	34,921	10,22,372 (3)

Source: Information furnished by the State Forest and Agriculture Departments.

Note – Figures in brackets indicate percentage of affected persons to the total population in the district.

It would be seen from the above that out of the estimated population of 10.22 lakh of the State, the total number of farmers affected by gregarious bamboo flowering and rodent menace was 0.35 lakh (3 per cent) of the total estimated population of the State. This was mainly due to inaction of the Department to utilise the available funds optimally for taking rodent control activities, as out of the total receipt of Rs.4.97 crore, an amount of Rs.29.65 lakh was utilised towards killing of rats. No concerted effort was taken by the implementing Departments to mitigate the misery of affected families. This could have been addressed more effectively and suitably; had proper planning and proper survey were conducted and proper utilisation of funds been ensured.

1.1.11 Monitoring, Control and Co-ordination

The weakness of planning could have been mitigated and controlled through co-ordination, monitoring and control but the nodal Departments were not found to have played any effective role. Neither the Planning Department nor the implementing Departments devised any modalities for monitoring disaster/ famine related activities. The State Level Monitoring Committee headed by the Chief Secretary was virtually non-functional. The status of implementation for prevention and preparedness measures were neither monitored nor followed up for ensuring their effectiveness. The State Planning Board had not formulated any system for periodical internal monitoring of the execution

of different works taken up under BAFFACOS. No reports/returns had been prescribed for submission by different implementing Departments to ensure proper execution of works and no modalities were devised for periodical field inspection. The nodal Department was not successful in ensuring coordinated efforts by the different Departments. No attempt was made by the State Government to evaluate the performance during the period covered by audit.

1.1.12 Response of the State Government to the deficiencies

On all these points being pointed out by audit, the Advisor and ex-officio Joint Secretary, State Planning Board admitted (July 2009) that most of the audit observations were correct. He also stated that much political debate arose on the implementation of the scheme during last four to five years and it was therefore, desirable to close the chapter as renewal of the past experiences would be wastage of time and energy. However, the fact remains that no effective action was taken by the State Government during the period covered by audit to ensure proper utilisation of fund for extending benefits to the affected family of remote areas but instead BAFFACOS fund was spent for creation of idle assets, misuse and diversion of funds as discussed in preceding paragraphs.

1.1.13 Conclusion

Considering the gravity of problem arising out of gregarious flowering of bamboo, the State Government did not finalise the centralised objectives with a focus on addressing the core issue of bamboo flowering, extraction and utilisation along with mitigation policy for the affected families. Different activities formulated by various Departments were not clearly spelt out which were due to weakness in planning. There was no coherent roadmap and Action Plan formulated by different implementing Department was not based on any block level or district level plan. Allocation of fund was done in an adhoc manner without any prioritisation of activities. The implementation of programme suffered due to uneven distribution of fund and only 12 *per cent*¹² of total earmarked funds (Rs.125 crore) was allocated to core activities responsible to combat bamboo flowering. There were cases of idle assets, wastage and unauthorised diversion of funds. Monitoring system also was deficient due to lack of regular flow of reports and returns from the implementing Departments to the Nodal Department and absence of periodical field inspection. BAFFACOS thus did

¹² Survey, mapping, regeneration, extraction, utilisation of bamboo (Environment and Forest Department) - Rs.9.64 crore and Rodent control, alternative and diversified cropping system (Agriculture Department) – Rs.4.97 crore

not address the core issue of preventing wastage of bamboo due to flowering by way of extraction and utilisation nor did it result in mitigating the impact on the affected families in the rural areas.

1.1.14 Recommendations

- Since bamboo plantation is an ongoing process, the State Government should take special efforts for timely extraction and regeneration of bamboo.
- Setting up a paper mill to use the abundant bamboo resources may be explored.