

**THE BAMBOO POLICY OF**

**MIZORAM**

**2002**

## **1. PREAMBLE**

- 1.1.** Bamboo represents a vast untapped major resource of Mizoram State whose full ecological and economic potentials remain underutilized; it needs to be recognized, developed and promoted in a manner ensuring ecological security for all round sustainable development of the State and well- being of its people.
- 1.2.** Bamboo is an essential component of forest eco- system, which is a dominant feature of state's landscape. Traditional living and lifestyle of Mizo society, to a large extent, is dependent on bamboo for its variety of uses and bamboo has much to offer by way of contributing to socio-economic advancement of modern Mizo society. The ecofriendly Bamboo crop has immense potential in improving rural economy, industrial development and a sound economic base for the state on sustained basis.
- 1.3.** Bamboo-sector development is a high priority thrust area of the State Government and Government of India. Thus there is a need to promote bamboo development for the benefit of rural sector.
- 1.4.** The change over from traditional use to a modern use tracking a high potential growth path in an eco-friendly manner needs a clear vision, an appropriate policy framework and a road map. Hence the necessity of drafting a Bamboo Policy.

## **2. SOCIO-ECONOMIC STATUS :**

- 2.1.** The economy of the State is primarily agrarian with majority of the people practicing jhum cultivation. There are no major industries in the State to provide regular source of income to the people. About 50,000 persons alone are employed in various Government and Semi- Government undertakings, which reckons to 6% of the total population. There are 4334 nos. of SSI units as on 1.4.1998 besides people practice poultry, piggery, pisciculture and dairy in the homestead. Per capita income of the State in 1996-97 is Rs.13,360. People are also engaged in sericulture, weaving, knitting and tailoring, bakery, workshops, trade, and in various cottage industries. Although literacy level in the State is 88.84% (2001 Census provisional figures ), second in the country, lack of infrastructure development, remote location, poor market linkages, inadequate power supply has resulted in slow pace of industrial development in the State. Difficult topography and limited flat terrain (Just around 3%) has also attributed to economic backwardness.

- 2.2. Jhum cultivation has become unproductive owing to frequent exposure of soil as is evident from the reduction of jhum cycle from 20-25 years to 4-5 years. Soil, moisture, vegetation, and bio-diversity loss has rendered large area refractory and unsuitable for jhumming. Presently jhum cultivation is practiced by burning standing Bamboo which in itself is a great loss in term of revenue.

### 3. RESOURCE SCENARIO OF BAMBOO :

- 3.1. Tropical moist deciduous forests and bamboo forests are the commonest type of vegetation in Mizoram. Bamboo occurs in the lower storey of Tropical Evergreen and Moist Deciduous Forests along the banks of rivers in the riverine forests and in the valleys with humid conditions. Bamboo is found from 40 metres to 1500 metres elevation but is rare in the eastern region of the State, particularly in Champhai, due to high altitude; open tracts of bamboo are scarce in east and south-east. Bamboo brakes cover about 6446 sq.krn, about 31% of geographical area of the State. Bamboo brakes are entirely of secondary origin; clear felling of primary forests results in establishment of bamboo especially *Melocanna baccifera* which dominates the species composition.
- 3.2. There are more than 20 species of Bamboo covering 9 genera, occurring in the State. Non-clump forming bamboo *Melocanna baccifera* (Mautak) is abundantly found contributing about 95% of the growing stock of Bamboo while other important species are *Dendrocalamus hamiltonii* (Phulrua), *Dendrocalamus longispatus* (Rawnal), *D. species* (Rawpui), *Bambusa tulda* (Rawthing), *B.longispiculata* (Rawthing chi) and *Arundinaria callosa* (Phar). Barring Mautak, other species are found in small proportion, yet are commercially important for value added products.
- 3.3. Amongst the edible bamboos, *Melocanna baccifera* (Mautak) is most favoured followed by *Bambusa tulda* (Rawthing), *Dendrocalamus hamiltonii* (Phulrua), *D.longispatus* (Rawnal) and *D.sikkimensis* (Rawmi).
- 3.4. No reliable data are available to authenticate volume of growing stock, annual growth, available bamboo yield, consumption and use due to annual burning operation of Bamboo during jhum season. But as per the Forest Survey of India's inventory carried out in 1988-89 the Bamboo stock in Mizoram is assessed at 12,950.75 (000) M. Tonnes and the annual yield being 3237.689 (000) M. Tonnes, while the annual consumption of bamboo for domestic purpose was estimated at 28.315 (000) M. Tonnes thus leaving an annual surplus of 3209.374 (000) M. Tonnes for Industrial and Trade purpose. Thus Mizoram alone contributes 14% of the country's growing stock of bamboo with about 9210 sq.km (49.10%) of the geographical area of 21018 sq.kms of the state.
- 3.5. Bamboos are annually worked under Mahal system since District Council Period. Mahal system is operated for Riverine Reserve and Inner line Reserve Forests only, covering 20 to 23 rivers & tributaries. Most of the Bamboo harvested by the Mahaldars is supplied to Hindustan Paper Corporation at Panchgram in Karimganj District of Assam. Rivers are preferably used for bamboo

transportation to HPC through Barak river. Substantive quantity of Bamboo is available outside the Government Forest in revenue land where it is used as burning material during jhum operation and is not harvested.

- 3.6. Bamboo flowering occurs at a periodic interval of 48-50 years in Mizoram. From past experience Bamboo flowering follows famine which is known as ' *Mautam*' after the flowering of *Melocanna baccifera* (Mautak) and *Thingtam* after *Bambusa tulda* (Rawthing). As per record Mautak flowered in 1815,1863,1911 and 1959 while the next expected flowering cycle is in 2007. As for Rawthing, flowering was observed in 1739, 1785, 1833, 1881, 1929 and 1977 and the next flowering is expected in 2025. Gregarious flowering and seeding of bamboo causes an increase in rat population. The massive rat population feeds on standing agricultural crop, causing its destruction and results in acute food scarcity.

#### **4. NEED FOR BAMBOO POLICY:**

- 4.1. Bamboo being a multipurpose, eco-friendly crop abundantly available, yet an underutilized natural resource, needs to be managed and exploited for sustainable use. Bamboo is conceived as a thrust area in the Industrial Development of Mizoram for the economic and ecological security of the people. This precious resource needs to be fully tapped as an Industrial raw material, as substitute for wood in rural/urban housing, engineering works, handicrafts, furniture and value addition through export. Undoubtedly Bamboo can revolutionize the economy of the State ensuring employment opportunities to a large number of people. Extension and awareness about bamboo sector development will be given a renewed thrust.

#### **5. AIMS AND OBJECTIVES :**

Considering the Ecological significance and vast economic potential of Bamboo in the State, aims and objectives of the Bamboo Policy shall be as under :

- 5.1. Protection and preservation of mountain ecology; protecting the mountain slopes by affording protection to bamboo forests and bamboo regrowth areas for sustained productivity and environmental security for the people.
- 5.2. Protection, conservation of rich bio-diversity associated with bamboo forests and regrowth areas and their future development.
- 5.3. Sustainable development and utilization of Bamboo resources through scientific management.
- 5.4. Promotion of private bamboo plantation (Individual and community owned) as the key thrust area for future economy of the State.
- 5.5. Promotion of bamboo cultivation in the homestead and as a cash crop and an essential component of agro- forestry to generate income and to meet the contingent need of rural households in the State.

- 5.6. Improvement of bamboo productivity in farm and forestry sector by use of biotechnology and improved management practices thus making bamboo plantation a profitable and attractive economic enterprise for securing adequate return on investment.
- 5.7. Promotion of bamboo based industries at cottage level, small scale, medium and large scale for utilizing the available resources at a sustainable level for generating assured income.
- 5.8. Revitalisation and promotion of local traditional Bamboo craft and art with improved technology, design and market linked trade for value added items for export through industrialized mode of production.
- 5.9. Promotion of bamboo sector development as an essential component of rural development strategy linked with forestry and agri-business sector in the State promoting rural employment.
- 5.10. Promotion of bamboo as an essential wood substitute by increasing bamboo production. Promotion of enterprises manufacturing bamboo based products and wood substitutes thereby reducing pressure on Wrests and reducing wood deficiency in the State.
- 5.11. Promotion of awareness and understanding of bamboo as "Green Gold" among farmers, traders, industry men in the State with a view to utilizing its full potential and to galvanise the rural and industrial sector in the State.
- 5.12. Effective exploitation of the economic potential of bamboo before the impending MAUTAM i.e. gregarious flowering in 2006-07.

## **6. APPROACH TO BAMBOO SECTOR DEVELOPMENT**

- 6.1. Conservation of bamboo-diversity, bamboo- germplasm and preservation of mountain ecology.
- 6.2. Use of Bamboo forests and bamboo regrowth areas for affording protection in critical watersheds, to human habitations, civil engineering structures like national and state highways, rural roads and hydro-power projects, etc.
- 6.3. Regulating bamboo-exploitation in jhum regrowth and jhum areas by involving Village Councils/Village Forest Development Committees (VFDCs) and facilitating gradual change over to agro- forestry management and practices.
- 6.4. Sustainable management and use of dedicated bamboo forests and bamboo regrowth areas for providing essential bamboo materials for traditional use and commercial use in bamboo based industries, enterprises, handicraft sector and for bamboo trade and commerce.

- 6.5. Promoting bamboo cultivation in homestead, agro- forestry sector as a cash crop using improved high yielding bamboo species for income generation and supporting bamboo based enterprises and bamboo trade.
- 6.6. Promoting private bamboo plantation as key thrust area for achieving the objectives enshrined in the policy. The focus will be on developing the sector as market driven and people oriented.
- 6.7. Providing supportive administrative, institutional framework to facilitate all round bamboo sector development by evolving a framework of incentives, subsidy, technical and professional support in regard to planting material, improved plantation technology, processing facilities and support services like training, credit, marketing, export facilitation etc.
- 6.8. Identification of select bamboo species for plantation raising and providing raw-materials to select industries like bamboo mat board, flooring and edible shoots having high demand in domestic and export market and adoption of improved technology and market & export linkages and supportive investments to promote such plantation & processing enterprises in the State.

## **7. THE STRATEGY**

### **7.1. Protection of Mountain Ecology and Environment :**

- 7.1.1. Mountain environment and ecology shall be protected and preserved and existing imbalance due to inappropriate land use, over exploitation of natural resources beyond carrying capacity shall be checked and prevented. The detailed action plan/guidelines will be formulated by September 2002.
- 7.1.2. Bamboo forests and regrowth areas in critical mountain slopes and around village habitations shall be afforded protection to ensure environmental security (protection of catchment, regulation of water flow, recharge of water table, conservation of flora and fauna etc. and protection of developmental infrastructure like roads, bridges, hydel projects, human settlements, habitations, etc.)
- 7.1.3. All variety of native bamboo species, ecotypes shall be protected and germplasm preserved. Efforts shall be made to conserve germplasm in in-situ and ex- situ. Bamboo Resource Development Wing will be co-coordinating agency with technological inputs from Department of Biotechnology, National Institute of Bamboo and Rattan, ICFRE and other scientific institutes within and outside the State.

## **7.2 Bamboo Resource Assessment:**

### **7.2.1. Mapping/inventorisation**

Data base in regard to bamboo is poor. Bamboo resource assessment i.e., mapping and inventorisation of bamboo shall be accorded highest priority and shall be completed in 2 to 3 years. Available expertise of Forest Survey of India (PSI), National Remote Sensing Agency (NRSA) and services of State Remote Sensing Application Centre and Department of Environment & forest shall be utilized to carry out the mapping and inventory for which required fund support shall be provided.

### **7.3. Dedicated land use for Bamboo Development :**

**7.3.1.** Bamboo rich areas having bamboo development, potential and having economic and ecological significance must be identified, surveyed, demarcated and dedicated to permanent bamboo growing (in government, community, private sector). The identification of such areas would be completed by September 2002.

### **7.4. Management of Bamboo Resource in the State :**

**7.4.1.** Bamboo occurs as a lower storey in Evergreen, Semi-evergreen forests along river banks and grows profusely in abandoned jhum lands. It occurs pure in bamboo-brakes. The existing bamboo resources within the notified forests and outside in government lands and jhumland and Village council areas shall be managed on scientific lines, keeping in view the end use, socio-economic need of local people and industrial need.

**7.4.2.** Bamboos within notified forests shall be managed as per approved management plan keeping in view sustainable forest management principles in association with local village communities under JFM (Joint Forest Management) concept}. Present system of bamboo harvesting by mahals shall be replaced in a phased manner. The existing bamboo shall be harvested and utilized employing improved and modern harvesting and utilization technology.

**7.4.3.** Bamboos outside government notified forests and in jhumland shall be managed i.e. conserved, protected and harvested (from dedicated bamboo areas under government community control) on scientific lines. Appropriate guidelines shall be evolved in consultation with the Village Councils, Environment & Forest, Local Administration Department (LAD), Revenue, Agriculture and other development departments. Harvesting would be done by Village Councils/VFDCs through labour cooperative societies or family lease system. Detailed guidelines will be notified by September, 2002.

**7.4.4.** As an incentive and to wholly involve the Village Council/VFDC in conservation, protection and sustainable management of Bamboo Resources in the respective village areas, bamboo management shall vest with Village Council/VFDC.

Village Council/VFDCs shall be empowered to manage the Bamboo Resources for which Act/Rules shall be enacted. Representative of Environment & Forest Department, Rural Department, LAD, Revenue shall be represented in Village Council/VFDCs to ensure management of bamboo resources is in conformity with Bamboo Management Regulations for each village. Thus Bamboo Resource Management will be a community enterprise with delegated powers/ vested interest created to conserve, protect, harvest bamboo resource in the Village Council area involving willing families in bamboo production, management, harvesting and supporting bamboo craft, bamboo industries in the rural sector. Detailed guidelines will be formulated and notified by September 2002.

#### **7.5. Protection from Fire :**

Bamboo resources inside notified forests and in Village Council areas shall be protected from spread of fire. Every year a forest fire prevention strategy and measures shall be adopted and implemented by making joint efforts by various government departments, Village Councils and social organizations. Required fund support shall be made available from government sources and Village Council fund (Bamboo Revenue).

#### **7.6. Regulation of Bamboo harvest :**

**7.6.1.** Bamboo, at present, is collected in an unregulated manner by villagers to meet their bonafide domestic need free or on payment of royalty. Bamboo from Government Notified Forests is sold by Mahal System. With a view to manage the bamboo resources in a sustainable manner and to ensure a support base to increasing bamboo yield to meet the local need and export of bamboo and improved bamboo produce, annual bamboo harvest and yield need to be predetermined through silvicultural availability, felling regulation, seasonal requirement, market need and in consultation with all concerned and regulated so that bamboo resources are optimally harvested and used.

**7.6.2.** Where market need exists, limited bamboo shall be harvested from Jhum areas by the respective Village Council/VFDC to meet the local bamboo need and industrial need.

**7.6.3.** In place of current system of harvesting of bamboo from forests by Mahaldars, alternate means for harvesting on long-term lease to individuals, community enterprise needs to be explored. A better, effective management system with greater involvement of local communities will be evolved.

#### **7.7. Bamboo Regeneration in Natural Bamboo stands :**

**7.7.1.** Bamboo regrowth and regeneration is not a problem in bamboo brake and open areas; however appropriate management methods shall be evolved and employed to ensure quality bamboo yield, keeping in view the end use need etc.



- 7.7.2.** Natural bamboo stands shall receive the technical support of Forest and Agriculture Department and available incentives to improve productivity and regeneration of bamboo.
- 7.7.3.** Of the 20 odd species of bamboo found in the State, about 5 species are found to be commercially significant i.e. Mautak (*Mellocanna baccifera*), Phulrua (*Dendrocalamus hamiltonii*), Rawnal (*D.longispathus*), Rawthing (*Bambusa tulda*) and Rawthing chi (*Bambusa, longispiculuta*). For edible bamboo shoots, Rawthing, Mautak, Phulrua, Rawnal, Rawmi (*Dendrocalamus sikkimensis*) are preferred. However, management and regeneration strategy of natural bamboo stand shall focus on preferred species keeping in view the end use requirement.
- 7.8.** Bamboo Plantation Development :
- 7.8.1.** Approximately 25000 Ha. of bamboo plantation will be concurrently created in next 6- 7 years essentially to replenish the bamboo resource which will be steeply depleted during gregarious flowering in 2006- 7.
- 7.8.2.** Bamboo Plantation raising shall be encouraged and promoted due to their high value, productivity, uniformity of crop, choice of species linked to peoples' need and industrial need. Such plantations of selected species shall be raised in private, community and Government sector. The required technical and scientific support and guidance shall be provided by the Forest, Agriculture Departments. Financial incentives shall also be given to willing beneficiary families interested in raising bamboo plantations from the State Agriculture, Horticulture, Environment & Forest, Rural Development, Soil Conservation Department through funds from beneficiary oriented schemes. Such willing farmers shall also be granted land lease on specific terms and conditions for raising bamboo plantations in government lands outside Notified Forests.
- 7.8.3.** Bamboo nurseries shall be established in the Rural Development Blocks with selected species of bamboo and quality seedlings of clonal origin shall be, raised for meeting the requirement of bamboo plantations in the region. A central nursery shall cater to the need of several blocks. Modern nursery and plantation technology shall be adopted and technical support and guidance provided to the Bamboo Plantation Programmes in the districts. Expert advice from National Level Institute like ICFRE, Agriculture Universities, State Forest Research Institute etc. shall be obtained for adoption, dissemination of improved nursery, plantation technology in the state.
- 7.8.4** Linkages between Bamboo Plantation Growers and Bamboo Enterprise, Industry and Craft Centres shall be established so that Bamboo Plantations support bamboo trade, bamboo industries and marketing of bamboo produce and products within and outside the State.
- 7.8.5.** Accessibility and market linkages should be the guiding factors for site selection of bamboo plantations.

**7.8.6.** The guidelines and modalities for raising and maintenance of plantations shall be worked out by Environment and Forest Department and would be notified by July 2002.

**7.9 Bamboo flowering and strategy to utilise surplus Bamboo before Mautam :**

**7.9.1.** Fullest possible utilization of bamboo before the Mautam in 2006-2007 shall be encouraged and promoted. Scientific harvesting of bamboo inside and outside the Government Forests, Jhum lands shall be encouraged, by granting concessional rates of royalty so that bamboo is harvested and utilized locally for traditional uses including house construction etc. Subject to fulfillment of local need, surplus raw/treated bamboo would be permitted for export under stipulated guidelines till before the gregarious flowering in 2006-2007.

**7.9.2.** Bamboo harvest and establishment of Bamboo Enterprise, Craft Centres and Bamboo Industries in small and medium industry sector shall be encouraged through incentive frame work as per New Industrial Policy of Mizoram, 2000.

**7.9.3.** Improved design for house construction, increasing use of improved products from bamboo for Infrastructure development works like constructions, road laying, retaining walls, Jhum terracing, water harvesting structures and gabions shall be encouraged. Improved design and technology shall be obtained from National and International Institutes to support and maintain such initiatives.

**7.9.4.** Bamboo Plantation in Private, Joint Sector shall be encouraged with a view to establish a resource base at the district level to provide raw-materials for the established industries in the state so that after the Mautam, the established industries do not suffer from want of sufficient quantity of bamboo.

**7.9.5.** A State level rodent control committee has been constituted for evolving a suitable strategy for combating the potential threats posed by the abnormal increase in rat population during Mautam. The Committee will evolve suitable logistical linkages in terms of striking an adequate balance between preventive techniques and damage control exercises.

**7.10. Bamboo Trade:**

With the policy reform in regard to management, harvesting, utilisation of natural bamboo resources in the State and promoting bamboo plantation development, it is expected that bamboo trade shall receive a fillip. With increased bamboo harvesting before the Mautam and establishment of bamboo industries and with support incentive framework, trade in bamboo and bamboo products within and outside the State shall grow. It shall be the endeavour of the State to promote trade in bamboo and bamboo products among the Mizo people. The bamboo traders shall be organised into trade associations with linkages with bamboo growers and the bamboo processing industries and bamboo exporters to rationalise the bamboo trade practices. Export will be promoted through establishment of Export Promotion Zones as envisaged in the Industrial Policy of Mizoram, 2000.

## **7.11. Bamboo Industries :**

- 7.11.1.** The Bamboo policy framework shall be encourage and promote establishment of bamboo enterprises and industries in cottage, small and medium industries sectors linked to the need of bamboo produce/ products within and outside the State. In the initial stage, many of these industries shall be established based on the Mautak bamboo which will be the major bamboo resource of the State suitable for manufacturing bamboo mat board, chop sticks, bamboo shoots, agarbatti sticks and other handicraft products. The New Industrial Policy of Mizoram 2000 with its thrust on bamboo industries development and associated incentives and subsidy framework shall encourage establishment of such industries and enterprises. Conjunctively, the bamboo policy shall lay emphasis on adopting and using proven technology suitable for manufacturing improved quality products catering to very specific needs and markets and establishing linkages within and outside the State. While simple technologies and manufacturing processes can be adapted by cottage and handicrafts sectors, import of technology shall also be encouraged and adopted in small and medium sector industries to produce quality products for sale within and outside the State and for export purposes. Bamboo mat boards and bamboo ply boards can be promoted as wood substitute for the growing construction needs within and outside the State. This will not only result in a value addition to bamboo products but will also be a wood substitute reducing use of timber within the State. Use of bamboo and bamboo products shall be emphasized in Government constructions where such uses are feasible and incentives shall be given for use of bamboo products in private and community constructions. Standard housing designs for various constructional purposes shall be evolved taking help of national and international expertise available.
- 7.11.2.** Other industrial use of bamboo is in manufacturing bamboo flooring, bamboo shoot industry and bamboo furniture in conjunction with timber and cane. These sectors need adoption of improved technology, standard/improved designs and improved artisan skill which will be actively promoted. Assistance of experts shall be taken in identifying suitable technology, product designs and in imparting training to artisans and craftsmen. Promotion of Bamboo industries would be undertaken by the State Industries department.
- 7.11.3** High value products will necessitate effective and appropriate manufacturing process and market and export linkages. This policy shall encourage joint ventures with entrepreneurs outside the State including foreign enterprises with technology, finance and export linkages. This arrangement will channelise the resources through local traders and manufacturing industries into domestic and international markets earning handsome revenue for the State. Present export policy in agro industry encourages such arrangements which should also be adopted and encouraged for bamboo sector development in the State.

#### **7.12. Entrepreneurial development :**

Entrepreneurship will be promoted through organised and volunteered participation of people. The Government shall facilitate the growth of entrepreneurship skills through several means such as education and training, promoting group formation, providing supports such as funding, credit, leases, tenurial security and consultation with people's groups and involving them in management committees.

#### **7.13. Market information dissemination :**

Dissemination of information regarding existing markets within and outside the States to the growers, traders, bamboo enterprises, etc. would be done through brochures, involvement of media, IT Network, etc.

#### **I 7.14. Research and Development:**

**7.14.1.** Research support for bamboo sector to improve quality, enhance productivity and value of products, sustainable management, conservation of germplasm and diversified products would be promoted through interactive involvement with the National Institute of Bamboo and Rattan Development.

#### **7.14.2. An interface with research wing of the Mizoram**

University and technical institutes outside the State would be established for problem specific and site specific research regarding bamboo growing, bamboo plantation development, management of natural bamboo stands, etc.

#### **7.14.3. Appropriate technology and technology transfer :**

Technology Park would be set up to facilitate effective lab to land transfer. Dissemination of technology shall also be through campaigns involving media, exhibitions, demonstration centres, etc.

#### **7.15. Human Resource Development :**

Adequate pool of trained manpower needs to be created for bamboo resource development, Propagation and supply of high yielding planting material to farmers, Harvesting, Management, Industrial production, Infrastructural uses, Marketing and Export. Due emphasis would be given to training of personnel within the State, Central Institutions and outside the country.

#### **8. FUNDING SUPPORT :**

Funding support to implement the various policy initiatives enunciated shall be provided from the programme funds of the various development departments. While bamboo resource development within the Notified Forest area shall be supported by bamboo development project under CSS, development of bamboo plantation in agro forestry sector shall be supported from respective programme

funds of Agriculture, Horticulture, Rural Development Department. Special programmes to finance bamboo plantation in farmer sector shall be prepared for support institutional finance by NABARD and NEDFi. Establishment of craft centres, training of artisans and craftsman and establishment of cottage and small and medium sector industries can be supported by government subsidies and institutional finance from industrial financing agencies and industrial investors and exporters. Support external funding shall be solicited from UNIDO, UNDP and other international funding agencies for supporting bamboo sector development including bamboo industries in the State.

## **9. INSTITUTIONAL ARRANGEMENT**

### **9.1. State Level Bamboo Coordination Committee :**

The implementation of bamboo policy and bamboo development programmes in the State shall be implemented by a number of development departments. Hence it is necessary to coordinate implementation strategy through an apex body under the Chairmanship of Chief Secretary, Mizoram. A State level bamboo development coordination committee shall be constituted with Commissioners, Secretaries and Head of Departments of line departments and representatives from Trade, Commerce, Industries, Banks, NGOs and farmers with the primary function to review and coordinate implementation of bamboo development programmes in the State.

### **9.2. The State Bamboo Development Agency:**

While the sectoral fundings shall be utilised and implemented by various development departments to implement and facilitate the special funding arrangement for establishment of bamboo industries, craft sectors, training and HRD and bamboo plantations to support the industries, a special agency namely Bamboo Development Agency (BDA) shall be established in the State drawing multi-sectoral experts from various development departments. Bamboo Development Agencies (BDA) shall report to the State level bamboo Coordination Committee and shall be responsible for bamboo development works under their charge.

### **9.3. Screening committee for Grant of Licences for Bamboo based Industries :**

An executive committee consisting of representatives of Departments of Environment & Forests, Industries, Finance, Trade & Commerce & Rural Development and Conservator of Forests Bamboo Resource Development Wing will scrutinise the applications from entrepreneurs and recommend grant of licences for various categories of units for final decision by the Bamboo Development Agency. The Screening Committee will verify the availability of raw material, financial position, investment source and the entrepreneurial capability of the applicant and, on merit, recommend grant of Industrial licences.

**9.4. Bamboo Resource Development Wing :**

A permanent Bamboo Development Wing will be set up in the Environment & Forest Department in the State by July 2002. The primary function of the Wing would be resource development and providing technical expertise for conservation and management of bamboos plantation within Notified Forests and plantations outside. The Bamboo Resource Development Wing will be headed by a Conservator of Forests.

**9.5. Constitution of Task Force for Fast Track Implementation of Bamboo Development and Harvesting and Utilisation before 2007 (i.e. before Mautam) :**

A Task Force will be constituted under the Chairmanship of Conservator of Forests of Bamboo Resource Development wing by July 2002. It will be dedicated exclusively for formulating a strategy for harvesting, and marketing for local industries and export before Mautam i.e. 2006-2007. The implementation plan for execution would be formulated by October 2002.

**9.6. Bamboo and Rattan Development Institute:**

It is proposed to establish a Bamboo & Rattan development institute in the State with support funding by Government of India. The Bamboo Institute, which will cater to the research and development requirement of bamboo development in the State, shall be actively associated with implementation of bamboo development programme.

**10. ACTS AND RULES**

All the acts and rules promulgated in the State and Centre shall be applicable for Bamboo development sector in Mizoram.

**11. ACTION PLAN**

The policy shall be implemented through appropriate action plan packages and the implementation of programmes shall be monitored from time to time so that policy objectives are achieved.

**12. POLICY REVIEW**

The policy shall be reviewed periodically so that essential policy directives and imperatives are evolved from time to time.