NAGALAND BAMBOO POLICY

VISION STATEMENT

The Naga people have survived through the centuries with the diverse and varied uses of bamboo and its products. From the cutting of the umbilical cord to the mats that have wrapped the dead for burial, Bamboo has been integral to the life of the Nagas. It continues to play a predominant role in the life of the people even today in every walk of life that ranges from agricultural tools and implements to shelter, food, and livelihood.

Bamboo, the fastest growing and highest yielding renewable natural resource, and found extensively all over the State, constitute one of the most important resources of Nagaland which has to be put to use in the present day context for the benefit, growth and development of the people.

Denudation of forest cover, degradation of environment and fast deteriorating ecology threatens the very existence of man and animal. The development of the natural bamboo resources of Nagaland will greatly add to the environment and the ecological balance of the land consequently having great impact on the quality of life of the people.

A planned, scientific and holistic approach to the cultivation and management of bamboos on a sustained basis can be an inexhaustible source of goods and services and can play a significant role in the development of the State.

With increasing demand of timber and wood, which is becoming a scare commodity in the world, bamboos can serve as an alternative to many of the forest products. Its wide range of uses and its great versatility qualifies it to be a multiple use alternative to timber which will add greatly to the rural agricultural economy in general and act as poverty alleviator for the rural poor in particular. Through the processing of such bamboo goods and products and incorporating many other economic uses, bamboos can boost the economy of the State and facilitate the entry of Nagaland into the world economy.

The Nagaland Bamboo Policy is thus adopted to attain such goals:

1. **RATIONALE**

1.2. Bamboo has been the basic natural resource that has helped mankind to survive and progress since primitive days. Tribal people, particularly the Nagas, continue to depend on bamboo for their existence and sustenance. Bamboo qualifies to be a multiple use alternative to timber in the rural agricultural economy in general. Its use has grown over the centuries and the study of bamboo has currently identified over 1500 use of bamboo.

1.1. Denudation of forest cover, degradation of environment and fast deteriorating ecology threatens the very existence of man and animal because of its adverse impact on climate and ground water resources. Accelerated overuse and mismanagement of our natural forest resources and galloping rise in human and livestock population is leading to fast dwindling of our natural resources with adverse consequences leading to impoverishment of watershed, disruption of ecological balance and consequently having an adverse impact on the quality of life of the rural people who constitute 80% of the population of the state.
1.3. Bamboo is one of the fastest growing plants on the planet. Apart from its critical role in maintaining the fragile environment in the forms maintaining the balance of Oxygen and carbon dioxide in the atmosphere, it is the fastest growing canopy for greening of degraded areas and capable of generating more oxygen than equivalent stand of other tree species. It lowers light intensity, protects against ultraviolet rays, and is an atmosphere and soil purifier.

1.4. Bamboo is a hardy and versatile species, which is adaptable to a wide range of soil and climate. It responds well to high inputs like irrigation and fertilizers for higher productivity.

1.5. Bamboo is a viable alternative of wood as timber. Technology inputs to the qualities of versatility and resilience has given it a totally wider scope of uses in the form of pulping, boards, Ply furniture, handicrafts and many other use including energy alternatives in the form of bamboo charcoal and biomass electric generating resource.

1.6. Bamboo shoot has been identified as food with a large commercial market the world over. Bamboo leaves can promote various forms of medicine, apart from being a rich fodder for domesticated animals.

1.7. Bamboos are the fastest growing and highest yielding renewable natural resource. If managed on sustained basis, bamboos can be an inexhaustible source of goods and services and can play a significant role in the restoration and rejuvenation or rural economy.

1.8. Bamboo is therefore, one of the most important forest resources in Nagaland. Its wide range of uses and its great versatility qualities it to be a multiple use alternative to timber, food in the rural agricultural economy in general and as poverty alleviator for the rural poor and tribal in particular.

1.9. Mass propagation of bamboo by active involvement of the people for plantation on private and public jhumlands is feasible as the plantation, management and harvesting technique of bamboo is well known to the rural people.

1.10. A planned and scientific approach to the cultivation and management of bamboos in the state will greatly contribute to the economic development of the state.

2. THE BAMBOO RESOURCE OF NAGALAND:

2.1. Bamboo is found extensively all over Nagaland. It occurs as a predominant plant in portions of the districts of Dimapur, Peren, Mon and Mokokchung; while, it is readily found mixed with other forest species in all other districts of the state. The growing stock of bamboo been estimated to the around 8.96 million hectares in the country, out of which about 5% of the growing stock is assessed to be available in Nagaland which work out to be about 0.448 million Ha or 4,48,000 Ha.
2.2. The predominant species of bamboo found in Nagaland are Kakoo (Dendrocalamus hamitonii), Daloo (Teinostachyum dullooa) and Jati (Bambusa tulda). They occur almost all along the lower belts in continuous strips of some length descending down to plains along the border with Assam. While Kakoo and Daloo clumps are characterized in moist localities along the nalas and streams, Jati occupies better-drained sites. In more accessible localities along the roads, bamboos have been over cut while, in other areas they have been left untouched for many years.

2.3. There has not been any detailed study made on bamboos in Nagaland, but currently around 22 species have been identified which are spread all over Nagaland.

a. Sinarundinaria griffithiana (Munro) Chao & Renv.
   (Arundinaria griffithiana Munro) Saramti region
b. Sinarundinaria elegans (Kurz) Chao & Renv.
   (Arundinaria elegans Kurz) Puliebadze, near Kohima.
c. Sinarundinaria rolloana (Gamble) Chao & Renv.
d. Sinarundinaria nagalandiana Naithani Niriyo Peak, Wokha.
e. Chimonobambusa callosa (Munro)
   (Arundinaria callosa (Munro) Puliebadze above Kohima and Mao.
f. Neomicrocalamus prainii (Gamble) Keng f.
   (Arundinaria prainii Gamble) Puliebadze, Japfu Range.
g. Bambusa balcooa Roxb. Wokha
h. Bambusa tulda Roxb. Kohima, Jalukie region
i. Bambusa palliada Munro Wokha, Kohima and Peren region
j. Dendrocalamus hookeri Munro Kohima, Wokha
k. Dendrocalamus hamitonii Nees et Arn ex Munro
   Dimapur-Kohima Road, and Wokha.
l. Dendrocalamus gigantues Munro Kohima, Mao.
m. Dendrocalamus calostachys (Kurz) Kurz
   Phekerkrima, Dimapur and Kohima.
n. Schizostachyum polymorphum (Munro) Majumdar
   (Pseudostachyum polymorphum Munro)
   Longsachu near Wokha
o. Schizostachyum dullooa (Gamble) Majumdar
   (Teinostachyum dullooa Gamble) Yikum near Wokha
p. Schizostachyum fuchsonianum (Gamble) Majumdar
   (Cephalostachyum fuchsonianum Gamble)
   Kohima, Zulhami – Kilomi area
q. Melocanna baccifera (Roxb.)
   Kurz. (M. bambusoides Trin.) Jalukie

1. AIMS AND OBJECTIVES:
Keeping in view, the ecological significance and vast economic potential of bamboos in the state, the Nagaland Bamboo Policy is envisaged to achieve the following Aims & Objectives:
1.1. Protection & conservation of rich bio-diversity associated with bamboo forests and bamboo growth areas in the state.

1.2. Sustainable development and utilization of bamboo resources through scientific management.

1.3. Promotion of bamboo plantation (by Government, Individuals and communities) as they key thrust area for future economy of the state.

1.4. Promotion of bamboo based industries for utilizing the available resources for generating income.

1.5. Revitalization and promotion of local traditional bamboo craft & art with improved technology & design and value addition for export through industrialized mode of production.

1.6. Promotion of bamboo as an essential wood substitute by increasing bamboo production and promotion of bamboo based enterprise in the state in order to reduce pressure on forests.

1.7. Promotion of awareness and understanding of bamboo as “Green Gold” among farmers, traders, industry, and the people in the state with a view to utilizing its full potential and to galvanize the rural and industrial economy in the state.

1.8. Effective exploitation of existing mature bamboos before the impending gregarious flowering.

2. THE STRATEGY:

The Development of Bamboo in Nagaland will be approached in a Mission mode, which shall have two approaches namely:

a. Development of Bamboo as a Resource

b. Development of Bamboo as an Enterprise

3. DEVELOPMENT OF BAMBOO AS A RESOURCE:

Strategy for cultivation and management of bamboo resources in the state shall be evolved with special focus to the following activities;

a. Inventorization of the bamboo resources, including identification, documentation, demarcation, assessing the extent of various types.

b. Assess scope and potential of bamboo growth and regeneration, both in Government land and in private/community land.

c. Evolve scientific management practices for naturally occurring bamboos and plantation bamboos to improve productivity and harvesting.

d. Create massive and consistent awareness of the value of bamboo among the people, especially among major stakeholders.

e. Evolve suitable policies to deal with gregarious flowering of Bamboo.

f. Set up appropriate Institutes for research and development of bamboos, both for regeneration and industrial processing & value addition.

g. Evolve suitable techniques of multiplication and develop infrastructure for mass production of planting materials for
commercial cultivation.

h. Introduce desirable species of commercial importance for cultivation in the state.

i. Establish infrastructure and mechanism for dissemination of bamboo production technologies to the common man.

j. Establish network of bamboo setum for different agro-climatic zones for ex-situ preservation of bamboo germ plasm.

k. Identify representation natural bamboo occurring areas within and outside Government land for in-situ preservation.

l. Development of communication network for development of Bamboo as in industry in Nagaland.

3.1. ACTION PLAN FOR DEVELOPMENT OF BAMBOO RESOURCES:

(a) Development of Natural Bamboo Forest:

Large tracts of land are covered by clump forming bamboos in the state, Most of which could not be utilized due to absence of extraction road and the difficulty in extraction. Proper management techniques supported by communication network can greatly accelerate the utilization of these already available bamboo resources in the state.

i. Identify, demarcate and quantify the extent of natural bamboo area

ii. Evolve management practice and harvesting techniques for natural bamboos

iii. Increase area of natural bamboos through aided natural regeneration in the immediate vicinities of the bamboo forests

iv. Improve communication network to access the existing bamboos for harvesting and transportation.

iv. Afford protection to bamboo forests and re-growth areas in critical mountain slopes and around village habitations to ensure environmental security. It shall also include such activities that will act as protection of river catchments, regulation of water flow, recharge of water table, conservation of flora and fauna etc. and protection of developmental infrastructure like roads, bridges, hydel projects, habitation area, etc.

vi. All varieties of native bamboo species, ecotypes shall be protected and germplasm preserved through the mechanism of bamboo setum, in-situ and ex-situ preservation.

vii. Bamboo resource assessment including mapping and inventorization of bamboos shall be accorded high priority in co-ordination with the institutes such as State Forest Research Institute, Itanagar, Forest Survey of India, National Institute of Bamboo & Rattans, National Remote Sensing Agency (NRSA), Nagaland University, State Remote Sensing Application Center, Nagaland, Department of Forest & Environment, Nagaland, etc.

viii. Areas with potential for commercial cultivation of bamboo, both within and outside Government land will be identified for development of bamboo
plantation on sustained basis.
ix. All natural bamboos within notified forests/Government acquired lands shall be managed as per approved management plan keeping in view sustainable forest management principles.

(b) Bamboo Plantation Development:

Nagaland with 89% of its total geographical area under the ownership of private individuals and communities offers a unique scope for raising bamboo plantation. Plantations will be promoted on individual landholdings as well as community lands. The concept of Joint Forest Management, currently promoted by Government of India for all forestry programmes funded by Central Government will also be promoted as listed below.

i. Promotion of bamboo cultivation by individuals and communities on private and community lands which forms 89% of the total area of the state through the active participation of the village Councils, VDBs and VFCs.

ii. Introduction of bamboos having commercial superior and desirable attributes for large-scale cultivation to augment the existing local varieties of bamboos in the state.

iii. Development of bamboo nurseries and distribution networks in both the Government and the private sector to ensure adequate and timely supply of high quality planting materials.

iv. Encouraging the participation of private sector wherever Government, private and community land can be made available by way of land lease.

v. Development of research infrastructures for introduction and adoption of technological innovations.

vi. Development of mechanism for technology transfer, extension and awareness education.

vii. Streamlining of finance and credit facilities for bamboo plantation, management and harvesting.


ix. Bamboo cultivation to synchronize with existing farming practices, such as jhuming, etc to maximize interim benefits.

x. Structural changes within the Government machinery to provide people oriented bamboo development programme.

4. REGULATION OF BAMBOO HARVEST:

At present, transplantation of unprocessed bamboo requires transit pass through the payment of forest royalty. Production and transportation of bamboo and its products should be hassle-free and least cumbersome, if mass cultivation and production is to take place. It will be the endeavor to do away with the present systems of transit pass etc. for transportation of bamboo through appropriate administrative decision and alternate means of realizing forest royalty evolved.
5. **PROTECTION FROM FOREST FIRE:**

Protection from forest fires can greatly reduce economic loss. Both preventive and control measures need to be resorted to. Advantage will be taken of the existing institutions such as VDBs, JFM, VCIs, etc. for awareness and enforcement of preventive measures at the local level. Control measures are possible with the active participation of the government, since financial implications are involved. Adequate financial provision will be required to sustain the efforts of these institutions for their multi-functional roles in overall economic development of the village as well as promoting preventive measures.

6. **BAMBOO FLOWERING AND STRATEGY TO UTILIZE SURPLUS BAMBOO:**

6.1. Fullest possible utilization of bamboo before flowering shall be encouraged and promoted. Scientific harvesting of bamboo inside and outside the Government forests, Jhum lands shall be encouraged.

6.2. Construction of extraction road/path network to reduce extraction cost. These networks will facilitate replenishment of the depleted bamboo areas.

6.3. Increase the use of improved products from bamboo for infrastructure development works like construction, road laying, retaining walls, jhum terracing, water harvesting structures and gabions. Improved design and technology shall be obtained from National and International Institute to support and maintain such initiatives.

6.4. Conversion of Bamboo to other mass scale uses such as Bamboo Charcoal and Biomass energy plants for generation of power shall be promoted.

6.5. Replenishment of depleted bamboo growing stock through artificial regeneration using modern scientific technology of micro-propagation protocols developed for important bamboo species.

7. **BAMBOO TRADE:**

7.1. With the policy reform in regard to management, harvesting, utilization 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 flowering and establishment to bamboo industries and with support incentive framework, trade in bamboo and bamboo products within and outside the State shall grow. It shall be the endeavor of the State to promote trade in bamboo and bamboo products among the people. The bamboo traders shall be organized into trade associations with linkages with bamboo growers and the bamboo processing
industries and bamboo exporters to rationalize the bamboo trade practices.

7.2. A study to organize the marketing structure of the Bamboo Industry that may evolve in the State is a priority need. Such studies will incorporate issues such as movement of the products from the primary producing point or the cultivation areas to the Industrial location. The various dynamics and the location of activities such as collecting points, wholesale marketing points, auction points etc have to be worked out meticulously. It will ascertain the cost of the raw material, taking into account the difficult terrain and from where the Bamboo is to be extracted, the shortage of manpower in the labor. Such a study will be undertaking with the aim to contain the cost of raw material required for promoting the Bamboo Industry. This exercise will be directed to ensure that the Bamboo products of Nagaland become commercially viable with competitive pricing including comparison with wood-based products as also Bamboo products from other parts of the world.

8. INFRASTRUCTURE FOR DEVELOPMENT OF BAMBOO TRADE AND COMMERCE.

The development of Bamboo as an Economy shall entail substantial infrastructure requirements especially relating to road, communication and power to cut down cost of extraction and maximize profit. A very good network of extraction roads is required which need to be tie-up with schemes such as agri-link roads and rural connectivity programmes under PMGSY. In-built component for development of roads also need to be introduced in bamboo development programmes for areas not covered by the above schemes. It shall endeavor to initiate special infrastructure programmes for Bamboo roads and strengthening the Rural Power programmes to provide special infrastructure for the development of bamboo as an industry in Nagaland.

9. DEVELOPMENT OF BAMBOO AS AN ENTERPRISE:

Development of “Bamboo as enterprise” shall evolve policies and action plans that will focus on the following aspects:

A. Promote Bamboo based Industries:
   i. Food Products
   ii. Medicinal, Chemical Products and Alcohol Beverages
   iii. Craft, handicraft and Art Products
   iv. Value added products and wood substitutes such as ply, flooring tiles, shuttering, etc.

B. Create awareness of the uses and value of Bamboo by imparting Training, Seminar, Workshop, etc.

C. Promote and Develop traditional usage of Bamboo

9.1. The Bamboo Policy framework shall 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.

9.2. Initially the industries shall be established based on the bamboo resource of the State suitable for manufacturing of either semi-finished products or simple bamboo products such as mat board, chopsticks, bamboo shoots, aggarbatti sticks and other handicraft products.
9.3. While simple technologies and manufacturing process can be adapted by cottage and handicrafts sectors, import of technology shall also be encouraged and adopted in small and medium sectors industries to produce quality products for sale within and outside the State and for export purposes.

9.4. The following will be the broad areas identified for promoting various Bamboo based industries:
   a. Finished Industries Bamboo products in the form of Bamboo ply, Bamboo timber, flooring tiles, shuttering, curtain making, etc.
   b. Intermediary Bamboo industries and semi finished products for production of chopsticks, toothpicks, skewers, incense sticks, etc.
   d. Bamboo Charcoal and Bamboo Charcoal Industries Products in the form of active Bamboo charcoal filter products.
   e. Bamboo Food Products in the form of:
      i. Raw Bamboo shoot food products
      ii. Finished Bamboo shoot food products
   f. Bamboo Medicine and chemical products/Alcohol Beverages
   g. Bamboo related ancillary activities such as Tourism etc.

11.5 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.

11.6. Use of bamboo and bamboo products shall be emphasized in Government constructions where such uses are feasible. Standard housing designs for various constructional purposes shall be evolved taking help of national and international expertise available.

11.7. High value products will necessitate affective 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 channel the resources through local traders and manufacturing industries into domestic and international markets earning revenues for the State. Present export policy in agro industry encourages such arrangements. This approach shall also be adopted and encouraged for bamboo sector development in the State.

11.8. The State Industrial Policy – 2000 will be reviewed to include a framework of incentives and subsidy to encourage establishment of such Bamboo industries and enterprises.

11.9. The State Industries department will act as the Nodal Department for the promotion of such Bamboo based industries whose role would also cover to promote training, quality control, standardization, assistance, scientific and technical support, market support, publicity, education, incentives and patronizing in bamboo related activities as indicated below:
a. Training to facilitate entrepreneurs by way of arranging short term as well as intensive enterprise oriented training programmes, Turnkey Entrepreneurship Development Programmes, etc.
b. Collaborate with other institutions/organizations/engaged in bamboo related activities. Create awareness, encourage, assist and undertake bamboo based trade or business or profession.
c. Undertake and encourage research, development and application work in bamboo sector Industrial development.
d. Provide Technical Assistance and Undertake comparative study of available technology both indigenous as well imported, vis-à-vis its suitability, cost involvement, ease of operation and adaptability, etc as also undertake identification of machinery, manufacturers and assistance in import and installation.
e. Undertake Techno-economic feasibility studies and provide assistance for Preparation of project profiles of feasible and viable projects of the various bamboo based industries which could be taken up in the State.
f. Undertake intensive Market study of the marketing prospects of Bamboo products that are produced from the Region including engaging Consultancy firms to undertake such surveys and study to identify potential buyers with their basket of purchase items as also tie-up buy back arrangements.
g. Provide assistance in export of exportable Bamboo products.
h. Financial assistance: The Department shall act to explore and obtain fund, assistance, grant, contributions and loans towards development of bamboo and bamboo utilization. A separate and exclusive fund could be created for promotion and development of Bamboo Industries in the state.
i. Identify and promote bamboo usage in both the organized and the un-organized sectors.

11.10. Usage of existing infrastructure & facilities:

a. The mini tool room, which is expected to be operationalised soon, will be geared up to manufacture/fabricate some of the machinery, tools and implements required.
b. Utilize existing platforms like the IITF, etc for showcasing end products.
c. Semi-finished products could be produced in clusters or as community projects. Thereafter projects for the finished products or high-end and export oriented bamboo products could be set up at the Industrial Growth Center (IGC) and the Export Promotion Industrial Park (EPIP) where all necessary basic infrastructures shall be made available. The proposed IIDCs could also be made available for setting up bamboo-oriented projects.

12. HUMAN RESOURCE AND ENTREPRENEURIAL DEVELOPMENT:
12.1. 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, Infrastructure uses, Marketing and Export. Due emphasis would be given to training of personnel within the State, Central Institutions and outside the country.

12.2. The State Bamboo Policy will given focus on the following areas for entrepreneur development in the State for development of the Bamboo as a resource and as an industry.

a. Propagation of the modern uses of Bamboo among the general people of the State.

b. Inclusion of Bamboo in the School syllabus and also as specialized subjects in college and University studies.

c. One of the it is in the State will be especially structured to impart training and skill on bamboo related activities.

d. Identification and capacity building of entrepreneurs in Bamboo technology with the training programmes confined to the specialized area of usage.

e. Appropriate policy to promote transfer of technology and transplanting it in the region.

f. Infrastructure for marketing, transportation and the necessary infrastructure including roads and communication linkages both for extraction of Bamboo and its processing and ultimate marketing will require to be given special attention.

g. **An aggressive marketing policy** to propagate and promote the Bamboo products and use of Bamboo as eco friendly timber will have to be evolved for which substantial expertise and funds have to be made available.

h. In the realm of Bamboo Craft, Handicraft and Art the following activities will be promoted:

(i) Capacity building of existing craftsmen

(ii) Promotion of new manpower

(iii) Specialization

(iv) Diversification

(v) Design intervention

(vi) Technology inputs such as treatment, bleaching, colouring, etc. techniques.

i. Consultants shall be hired wherever their inputs are required specially pertaining to survey, assessment of product cost as also aggressive marketing advertisement and promotion of the Bamboo products of Nagaland.

j. The Government will have to initially play a pro-active role by provision of necessary funds in all the critical areas where the new private entrepreneur are not able to meeting the requirements.
k. Training programme outside the State and the country shall be promoted in specific and selected field involving policy makers, entrepreneurs and people in the handicraft field.

l. Entrepreneurship will be promoted through organized 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.

13. RESEARCH AND DEVELOPMENT:

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

13.2. An interface with research wing of the Forest Department 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.

13.3. Appropriate technology and technology transfer would be facilitated through establishment of Technology part to facilitate effective lab to land transfer.

13.4. Dissemination of technology shall also be through campaigns involving media, exhibitions, demonstration centers, etc.

13.5. It is proposed to establish a Bamboo & Rattan development institute in the State with support funding by Government of India. The Bamboo Institute will cater to the research and development requirement of Bamboo development in the State including design intervention in collaboration with existing Institutes such as NID, NIFT, BCDIIPRTI etc.

13.6. The various species of Bamboo of Nagaland needs to be put under intensive industrial testing to ascertain the industrial use of the various species. This exercise has been partially undertaken by the CBT/UNIDO, Guwahati. It should be further continued for the Bamboo of Nagaland. Only after identifying the species, which can be put into commercial use, can we embark on the activity of commercial scale plantations. An Institute will need to be identified or set up to undertake such continuing research works. Linkages with Nagaland University will be explored in this regard.

13.7. For Bamboo medicine a specific Research Institute will require to be set up which will not only research on innovative medicinal use of Bamboo but also build up on the traditional and inherent knowledge amongst the various tribes of the North-East.

13.8. Bamboo food products will be another new area of activity requiring active promotion and development by the Government. A part from tying up the production based of Bamboo shoots, various activities involving preservation and processing will have to be given direction through research and development center. This center will also study the traditional methods of preservation and uses of Bamboo shoot as food for promoting commercial production. Side by
side, specially food products from Bamboo shoot identified with the North-East will also be promoted.

14. **INSTITUTIONAL ARRANGEMENT;**

14.1. The implementation of bamboo policy and bamboo development programmes in the State shall need to be undertaken in a Mission mode. Since it 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 Minister, Nagaland under whom a state level Bamboo Agency shall be constituted with the Ministers, Commissioners, Secretaries and Head of Department of line departments as representatives from Entrepreneurs, Trade, Commerce, Industries, Banks, NGOs and farmers with the primary function to review and coordinate implementation of bamboo development programmes in the State.

14.2. The Bamboo Agency shall be assisted in its function by two Task forces for:

A. **Task Force for Development of Bamboo as resource and**  
B. **Task Force for Development of Bamboo as an enterprise**  

It shall comprise of the Departments as may be designated and set up by the Government of Nagaland from time to time.

14.3. While the sectoral actions shall be implementation by various development departments, to facilitate the task of co-ordination among the various agencies that will work to promote the uses of Bamboo in the State, the Bamboo Agency it shall be assisted by a **Nagaland Bamboo Agency Office.**

14.4. Permanent Bamboo Development Wing will be set up in the Departments of Environment & Forest and the Industries & Commerce in the State while every other related Departments shall constitute Bamboo Cells in their respective Departments. The primary function of the Wings and the Cells would be resource development, providing technical expertise for conservation and management of bamboos plantation within Notified Forests private & community plantations and developing bamboo based Industries with appropriate Action Plans.

14.5. The existing District level bodies such as the District Forest Committee and the District Agri-Allied Committees which function under the District Planning Boards shall assist the Bamboo Agency at the District level. At a later stage, after the Bamboo Task forces set up their working teams appropriate District Support Unit shall be set up at the District/Sub Divisional Level to coordinate the activities of the Bamboo Agency.

15. **FUNDING OF THE BAMBOO POLICY:**

15.1. The Bamboo Agency will maintain a Bamboo fund to achieve the goals as set out in the Nagaland Bamboo Policy. This shall consist of the funds received from the National Bamboo Mission, allocations from the State Plan and any other sources as the Agency may so obtain. It may also raise loans from the State Government, the Central Government or from any other sources as may be approved by the State Government of Nagaland for the development of Bamboo as an industrial activity in the State.

15.2. 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 sectors shall be supported from respective programme funds of Agriculture, Horticulture and Rural Development Department. Special programme to finance bamboo plantation in farmer sector shall be prepared for support institutional finance by NABARD and NEDFI. Establishment of craft centers, training of artisans and craftsmen 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.

15.3. While the State shall provide for the activities of the Bamboo Agency from within its Plan and also endeavor to obtain funds out of the National Bamboo Mission, funding in the form of Grants and/or Credit will be explored through the various Financial SIDBI, NEDFi, CBTC, Banks and state level institutions like NIDC and NSCB.

15.4. There shall be a Nagaland Bamboo Fund comprising of the following components
   a. Bamboo as Resource Fund
   b. Bamboo as Enterprise Fund
   c. Village Bamboo Fund (To be used as Micro Credit)
   d. Corpus fund for the Bamboo Agency Office.

16. **ACTS AND RULES:**

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

17. **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.

18. **POLICY REVIEW:**

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

19. **SHARING OF BENEFITS:**

The State Government will levy the royalty Sale tax Excise and any other taxes as enforced from time to time on the bamboo harvest and the Bamboo Products produced in the State.

**THE NAGALAND BAMBOO DEVELOPMENT AGENCY/BOARD**

As outlined in the Nagaland Bamboo Policy the Nagaland Bamboo Development Agency will be set up to achieve the aims and objectives outlined in the Vision and the Policy statement of the Nagaland Bamboo Policy working in close conjunction with the National Bamboo Mission.

The apex body shall be named the Governing Body of the Nagaland Bamboo Agency and shall be constituted as follows:
1. Chief Minister - Chairman
2. Minister Forest
3. Minister Agriculture
4. Minister Horticulture
5. Minister Industry & Commerce
6. Minister RD
7. Minister REPA
8. Chief Secretary
9. Development Commissioner
10. Financial Commissioner
11. Pr. Secy. Agriculture
12. Secretary Industry
13. Representative Jt. Secretary or above of the concerned Ministry in GOI
14. Representative of DONOR
15. Representative of the NEC
16. Representative of CBTC/UNIDO
17. Representative of TIFAC
18. DGM SBI (Lead Bank)
19. Representative of NABARD
20. Agriculture Production Commissioner - Member Secretary

Members from the following Institutions shall be co-opted into the Bamboo Board:

a. Nagaland University
b. SASARD
c. SARS
d. ICAR
e. RFRI Jorhat
f. RRL Jorhat

The Agency shall sit at least four times in a year to deliberate and draw up the action plans to implement the policies outlined in the Bamboo Policy.

It shall set the guidelines for the various Task Forces set up for the purposes of the Bamboo Mission as also review its activities from time to time.

It shall draw up the Annual Budget of the Mission as also explore the possibilities of funding the various projects identified by the Task Forces.

It shall review the various incentive programmes for the development and promotion of Bamboo as Resource and Enterprise in the State.

**TASK FORCE ON "BAMBOO AS RESOURCE"**

The task force for development of Bamboo as resource shall consists of the following:

1. Principal Secy. (Forest) - Chairman
2. PCCF - Member Secretary
3. Director (Agri.)
4. Director (Wasteland)
5. Director (Soil & Water Conservation)
6. Director (Horticulture)
7. Director (RD)
8. Director (Industries & Commerce)
9. NEPED

The task force shall have as its mandate and agenda to implement the various policies for development of “Bamboo as Resource” as outlined in the Policy Statement of the Nagaland Bamboo Policy.
TASK FORCE ON “BAMBOO AS ENTERPRISE”
The task force on bamboo as enterprise shall consist of the following:
1. Secretary Industry - Chairman
2. Director (I & C) - Member Secretary
3. PCCF
4. CE, Power
5. CE, R&B
6. MD, NKVIB
7. MD, NHHDC
8. MD, NIDC
9. DGM, SBI
10. Representative of CBTC

The Task force shall have as its mandate and agenda to implement the various policies for development of “Bamboo as Enterprise” as outlined in the Policy Statement of the Nagaland Bamboo Policy.

BAMBOO AGENCY OFFICE
The Nagaland Bamboo Development Agency shall be assisted by an Agency Office comprising of a dedicated team of officers drawn from the various fields. The new Team will be named the Nagaland Bamboo Team and shall work in the form of NEPED, which shall be focused on the development of Bamboo as an industry in Nagaland. The Office shall initially work in conjunction with the NEPED Office. People from the private sector as entrepreneurs, NGOs and consultants shall be co-opted, as members in the working team as and when deemed necessary.