Policy on Medicinal plants of the State of Tripura Preamble

The climatic condition of the state, its porximity to the bay of Bengal and the fact that the tropic of cancer has passed through it favours growth of luxuriant vegetation and presence of the moist deciduous and semi evergreen types of forests. The plants which have mecicinal properties

consitute the most significant and potent comonent of this vast reservoir of resources of the state. The sustainable maragement and harvesting of this rich resource base can conserve the biodiversity of the forests, sus ain human and environmental health, generate employemnt and ebhance export earning.

The policy of the state is therefore to furthere develop the resource base and allow its lightful place in the society by putting in appropriate technology so that its propagation and extraction generates income and provides employment to the people in a sustainable manner.

Vision of the policy

It shall be our endeavour to meet the present and future requirements of the medicinal plant users in consonance with the environmental needs of the State. We shall garner support from all walks of life in such a manner that we may be able to utilize the full potential of the medicinal plant resources of the state so that it becomes one of the major economic activities and it may play a vital role in providing employment, income generation to the people.

The vision is to create an environment of sustainable development of the resources so that the uncontrolled market forces do not lead to cegradation and decimation of the medicinal plant resources of the state and to infuse a sense of urgency amongst people to conserve and further develop the resources so that the state abounds with medicinal plants.

Goal

The goal of the policy is to develop the medicinal plant sector in such a manner that the state becomes a leading grower of all medicinal plants, which occur under the climatic and edaphic factors of the state. The course of action would involve to cultivating medicinal plants, by enlisting whole hearted participation of the people of the state including Joint Forest Management committees. Research support shall be provided in such a manner that all the medicinal plants get the tag of organic origin through organic farming so that on the one hand the essential ecological process and life support system are maintained and on the other hand the State becomes a rich source of processed nd semi processed medicinal plants and their derivatives for use in pharmaceutical industries of the country.

Under the global trend towards increase in usage of herbal products, there exist vast opportunity to carve out a niche in the medicinal plant trade for the State.

The topography, the climatic and edaphic factors are conduciva to the growth of a great variety of medicinal plants. Organized development of the sector would lead to increase in financial return, employment to rural masses and development of processing and pharmaceutical industry.

Documentation and preservation of traditional and tribal knowledge base of the medicinal plants leading to patenting of the plants and derivative products shall also be carried out.

Approach

The approach shall be to harness the immense potential of the State and to this end in view, picmotion of cultivation of medicinal plants of desired species in the farmers' fields and in the forest areas though JFM committees shall be aimed at. Since strong marketing initiative is the key to the success of any product, development of forward linkages with pharmaceutical industry will be given due priority.

Strategy

The strategy for development shall be a two pronged approach. While the role of the Government sector shall be consolidation, conservation, and development of medicinal plants wealth together with acting as a facilitator, the private sector on the other hand would be encouraged to set up base for production, value addition and manufacturing processes. Following shall be the development strategy :

Inventory of resources : Research on status of plants and their medicinal values reveal that there are at least 266 medicinal plants, which includes 68 species of trees, 71 herbs, 39 shrub and 88 climbers. However this list is not exhaustive and there could be many more medicinal plants. Therefore, survey and preparation of inventory of resources is required to be carried out and to this end in view, the services of an organization having expertise in this direction may be employed. It shall be followed by research into extration methods.

Conservation and development of the resources : The state will encourage both ek-situ and in-situ conservation programme. Designated medicinal plants conseravation areas (MPCA) shall be extablished across the state after completing the inventory of the resources. The MPCAs shall also act as field gene banks for important wild population of medicinal plants especially for those species which are endangered or threatened. The responsibility for establishment and maintenance of the MPCAs shall lie with the Forest Department These MPCAs will also act as the centres for training, demonstration and education, besides offering quality planting material to the private growers for enhancing the resource base.

Propagation

Assistance and support to private sector shall provided through a package of practices and identification of market opportunities. In the initial stages of development, the people shall be motivated so that they are encouraged to take up cultivation of medicinal plants. Training on cultivation aspects, harvesting, grading and storage shall be an important aspect of the support.

Research Support

Conforming the products to the international standards and quality is essential for any venture to become successful. There exist immense opportunity for application of clonal technology and tissue culture for production of quality medicinal product. Research support will be provided for large scale production of quality planting meterial through biotechnological interventions.

Documentation of indigenous knowledge

The state has one of the oldest. richest and most diverse cultural tradition associated with the usages of medicinal plants. There exist large number of rural herbal medicine prectitioners who have traditional knowledge of herbal home remedies for ailments and nutrition. In the rural areas, adjoining vast tract of forest lands. naturally occurring medicinal plants are used by the traditional healers for everyday ailments. This traditional system is in place since time immemorial and forms the backbone of local health system. This knowledge base has not yet beer documented and is traditionally carried forward in the fimily by word of mouth from the father to the son. This knowledge is required to be documented for further research and upgradation. Thus an important activity will be compilation of the indigenous knowledge scattered all around. The documentation shall be useful in addressing the patent and IPR issue also.

Marketing

Marketing is the toughest challenge in the development of the medicinal plant sector. Marketing isvital in helping small growers to move from subsistence economy to one in which they can initiate and sustain a more profitable enterprose on their own. The marketing strategy shall involve close interaction with pharmaceutical industry to develop specific market linkages for the products on the one hand and on the other, setting up infrastructure facilities like quality testing laboratory, collection centers with facilities like for drying, grading, packaging and storage.

> List of medicinal plants prooritized for cultivation in Tripura (Considering the consept of high value and low volume)

Scientific Name Part(s) Used Aegle marmelos Corr. Fruit Abroma angusta L.Leaves / Bark **Common Name** Bel Ulat-Kambal

Emblica officinalis Gaertn. Fruit Azadiratcha indica L. All parts Tamarindus indica L. Fruit / Seed Acorus calamus Linn.Flower/Rhizome Saraca asoca (Roxb.)Bark / Flower Terminalia bellirica (Gaertn). Fruit / Bark Terminalia arjuna Retz.Bark Terminalia chebula Retz.Fruit Mesua ferrea lirm. Flower Vitex negundo I.Leaves / Bark Ocimum bassilicum I.Whole plant Ban Litsea glutinosa (Lour) Bark Cassia angustifolia Vahl.Bark Cassia fistula L.Fruit / Bark Holanrhena antidysentrica Flem.Leaves / Bark Adhatoda vasica Nees. Leaves. Root Asparagus racemosus Willd. Root Sida cordifolia L.Root / Bark Piper longum L.Fruit Bacopa monnieri L.Whole plant Plumbago zeylanica L.Leaves Rauvolfia serpentina (L.)Root Boerhavia diffusa hinn. Whole plant Hemidesmus indicus (Linn.)Whole plant Tinospora cordifolia (Willd.) Stem Clerodendrum indicum (Linn.) Stem / Fruit Mallotus philippensis (Lamk.) Leaves Pandanus minor Linn.Leaves

Amloki Neem Tentul Vach Ashoke Bahera Arjun Haritaki Nageswar Nishinda Tulsi Mendha Seena Sonal Kurchi Vashak Shatamuli Berala Pipli Brahmi Chita Sarpagandha Punarnaba Anantamul Gulancha Bamunhati Kamela Payeshapata