

# REPORT OF THE SUB-GROUP-II ON NTFP AND THEIR SUSTAINABLE MANAGEMENT IN THE 12TH 5-YEAR PLAN



September 2011

## **NEW SCHEME**

*Submitted under:*

**Planning Commission's Working Group on Forests & Natural  
Resource Management**

## List of abbreviations

BSI	Botanical Survey of India
C&I	Criteria & indicator
CBNRM	Community-based natural resource management
CITES	Convention of International Trade in Endangered Species
FD	Forest Department
FPC	Forest protection committee
FRA	Scheduled Tribe & Other Traditional Forest Dwellers(Recognition of Forest Rights) Act
GDP	Gross domestic product
ICFRE	Indian Council of Forestry Research & Education
IEC	Information, Education, and Communication
JFM	Joint Forest Management
M&E	Monitoring & evaluation
MFP	Minor forest produce
NE	North east
NGO	Non-government organization
NMPB	National Medicinal Plants Board
NTFP	Non-timber forest produce
PDS	Public distribution system
PESA	Provision of Panchayats (Extention to Schedule Areas) Act
RCDC	Regional Centre for Development Cooperation
SFM	Sustainable forest management
SHG	Self help group
ToT	Training of trainers
UBFDB	Uttarakhand Bamboo & Fibre Development Board
VAT	Value added tax
VP	Van panchayat

## Section-A

### **Executive Summary**

One of India's largest unorganized sectors having a dependent population of about 275 million, and with a business turnover of more than Rs.6000 crores per annum, the NTFP sector has however and unfortunately been neglected since the pre-independence period. Otherwise known as the 'minor forest produce'(MFP) particularly implying to produces of plant origin with few exceptions, its actual contribution has been so major than in many of the State Forest Departments earn the major share of their income from these NTFPs/MFPs(like tendu leaves) particularly after green felling was banned. Although NTFP accounts for about 68% of the export in the forestry sector, conventional approaches of forest management focused largely on timber with but secondary attention to NTFP development, and Working Plans remained confined at best to elaborate prescriptions for bamboo alongwith few tit bits on other NTFPs. In absence of a comprehensive national/central policy/approach, contradictory legal provisions still prevail while differential state regimes create some of the biggest limitations which constrain a healthy growth of the NTFP sector. Bamboo, for instance, is defined as a 'minor forest produce' in the Forest Rights Act, 2006 whereas the Indian Forest Act, 1927 treats it at par with timber. PESA, 1996 gives ownership rights to local communities over MFPs whereas the regime created under Wildlife Protection Act doesn't.

NTFP contributes to about 20% to 40% of the annual income of forest dwellers who are mostly disadvantageous and landless communities with a dominant population of tribals. It provides then critical subsistence during the lean seasons, particularly for primitive tribal groups such as hunter gatherers, and the landless. Most of the NTFPs are collected and used/sold by women, so it has a strong linkage to women's financial empowerment in the forest-fringe areas.

Depleting resource base either because of diversion of forest land for non-forest use, or due to unsustainable harvesting practices has been the major ecological challenge in the NTFP sector with growing & visible impacts of climate change on crop production. On the other hand, poor R&D focus, inadequate post-harvesting practices, insufficient funds & infrastructure, and unorganized nature of the trade have made it financially vulnerable particularly for the primary collectors whereas the differential and sometimes contradictory tax & transit regimes in the states have adversely affected not only the trade but even the production of NTFPs as in case of brood lac.

NTFPs have a tremendous potential to create large scale employment opportunity thereby helping in reducing poverty and increasing empowerment of particularly tribal and poor people of the poorest and backward districts of the country. The Sal seed case has demonstrated how R&D supplemented with favourable policy environment can revolutionize the commercial fate of the NTFP collectors. Besides food security, NTFPs also provide for a big opportunity to establish eco-friendly, and small to medium enterprises at local level.

The sub-group on NTFP under the Planning Commission Working Group on Natural Resource Management discussed the issues, challenges, potential, and scope in developing the NTFP sector in the country and recommended the following strategies to be adopted for this purpose with a total budgeted amount of Rs.6590 crores for the 12<sup>th</sup> Plan:

- **Resource management** through conservation of all genotypes including of RET species; development of sustainable harvesting protocols; resource augmentation and development; zone wise inventory of NTFPs; zone wise prioritization/ selection of species for conservation, development and harvesting (CDH) ; pilot initiatives followed by a cluster based approach for further development of NTFPs; and SFM including revision of Working Plan Code, Certification and CBNRM. Total budgeted amount:Rs.2500 crores
- **Better opportunities in marketing** through Minimum Support Price (MSP) ; mechanism for market intelligence and information system; efficient Certification system for improved trade; revolving fund for primary collectors and their institutions; value chain development by aggregation; primary processing, grading, branding and certification; eco- services of NTFP such as Herbal ecotourism and local enterprise development; and encouraging corporate sector involvement- contract farming, infrastructure development, resource augmentation. Total budgeted amount:Rs.3000 crores
- **Capacity building** through formation and strengthening of local institutions; special training of front line staff and ToT; strengthening & restructuring existing institutions; modular training for primary collector, grower, entrepreneurs and traders; exposure visits of relevant stakeholders; and user friendly IEC materials. Total budgeted amount:Rs.250 crores
- **Expediting Research & Development activities** through strengthening existing potential National/State R&D institutions; undertaking state of art research on NTFPs; prime focus on developing new/alternate marketability for single market NTFPs, low value high volume NTFPs, silviculture and conservation biology of NTFPs; tapping the concept of Payment for Ecosystem Services (PES); and study on impact of non-anthropogenic factors like climate change. Total budgeted amount: Rs.290 crores
- **Ensuring an enabling policy environment** through formulation of a national level comprehensive policy; convergence of schemes implemented by different Ministries; establishment of an apex body such as NTFP Development Board and similar state level bodies; empowerment and strengthening of local institutions; ensuring better Access and Benefit sharing mechanism with legal provision; facilitating a compatible and uniform tax structure & transit rule; exemption of VAT; special compensatory support for NTFP crop failure; and introducing new schemes for NE region, mountain areas and Left Wing Extremism (LWE) affected states. Total budgeted amount:Rs.550 crores

The above efforts are expected to generate approximately 10 crore workdays in the 12<sup>th</sup> plan and about 2 crore workdays per annum thereafter in a sustainable manner, helping promote a green GDP, and contributing to the fulfillment of Millennium Development Goals .

## **Section - B**

### **1. Introduction**

Traditionally Non Timber Forest Products (NTFPs) refer to all biological materials other than timber extracted from natural forests for human and animal use and have both consumptive and exchange value. Globally NTFP / NWFP are defined as “forest products consisting of goods of



**Figure 1: The government records do not count adolescent girls and children engaged in tendu leaf collection as their age is below 18. Photo courtesy: RCDC.**

biological origin other than wood, derived from forest, other wood land and trees outside forests”.

It is estimated that 275 million poor rural people in India—27 percent of the total population—depend on NTFPs for at least part of their subsistence and cash livelihoods(Malhotra & Bhattacharya, 2010; Bhattacharya & Hayat, 2009). This dependency is particularly intense for half of India’s 89 million tribal people, the most disadvantaged section of society, who live in forest fringe areas. According to an estimate the

NTFP sector alone is able to create about 10 million workdays annually in the country.

Historically, the NTFP sector was neglected for many decades from main stream forestry, and they were considered as ‘minor’ (Minor Forest Produce), despite the fact that monopoly rights over several such NTFPs/MFPs fetched a good income for the Forest Department. After the ban on green felling, the income from NTFPs in the total income of the Department became the major one with that from timber marginalized, in many states. Export of NTFPs and its products contributes 68% of the total export from forestry sector.

NTFPs have a tremendous potential to involve local collectors for establishing micro-, small- and medium enterprises through clear tenured rights, better collection methods, financial support, capacity development, infrastructure and institutional support in near future. With these efforts there is a potential to create large scale employment opportunity thereby, helping in reducing poverty and increasing empowerment of particularly women, tribal and poor people of the poorest and backward districts of the country.

#### **1.1 *Current, NTFP related policies and programmes***

Presently there is no single NTFP policy at national level, there are several Acts , policies, or administrative orders like JFM resolutions which partially address NTFPs in reference to the

ownership, benefit sharing, monopoly, transit rules, tax ,conservation need etc. at national level and at state level too (**annexure-2**). Some of the policy concerns and specific issues in this regard include: inadequate/insecure rights of collectors; incompatible access regulation systems; inadequate benefit sharing mechanism; incompatible tax structure, and absence of commodity specific and region specific solutions, etc.

### **Institutional interventions & innovations:**

#### **Few success stories**

'Sanjog', a small NGO of Orissa not only promoted and registered small NTFP-based enterprises with the District Industries Centre thereby getting them the benefited under various schemes, but also established trade relationship with the Tirupati temple which now procures siali leaf plates produced by about 200 tribal women in the Mohangiri hills of Kalahandi-Balangir boarder area. The Tirupati deal fetches these women 20% extra income. Sanjog is also working on promoting lac cultivation since cultivation in just three trees of the Kusum (lac-host) gives a net income higher than that from 1 acre paddy cultivation.

Three women's self-help cooperatives promoted by Regional Centre for Development Cooperation(RCDC), another NGO of Orissa decided to adopt the MSP policy in 2011 and offered their version of minimum support price for hill broom and cashew drupe which worked with encouraging results. Their confidence in experimenting with this strategy and daring the traders came from RCDC and DSMS(District Supply & Marketing Society of the state government that helps with credit- and marketing support).

In Andhra Pradesh, the Girijan Cooperative Corporation(GCC), a public sector undertaking, procures NTFPs from about 5.6 million tribal primary collectors even in most inaccessible areas. It has embarked on value addition of several of these NTFPs like rock bee honey, tamarind, and amla, etc. and sells them with 'Girijan brand'. Its Girijan brand honey is processed in two centres at Rajahmundry and Chittoor. GCC has demonstrated models of business beyond welfare that makes welfare-centred business activity dynamic, challenging, and encouraging.

**1.2. Review of earlier efforts in some states:** A review of five state initiated NTFP based benefit sharing models are available in India which have started from 1970s- 2000. These states are namely Madhya Pradesh, Chhattisgarh, Andhra Pradesh, Odisha, and Uttarakhand though some other states have also developed some mechanisms. Various activities of micro-enterprise effort based on NTFPs are available in the respective selected states. Different stakeholder groups of NTFP (primary collectors, traders, processing units, and FD staff) primarily observed that institutional innovation has changed the trade situation in big way and further manifold improvement is possible. Many state governments have established separate organizations which are dedicated to the procurement, primary processing, storage and further marketing of raw products for NTFPs. There are some innovative initiatives taken by all the five states, e.g. **Uttarakhand** has developed "*Jarie Bootee Mandi*" under Uttarakhand Forest Development Corporation; **Andhra Pradesh** government has established Girijan Cooperative



**Figure 2:** Institution development such as collectivization of trade and establishing market linkages helped the primary collectors receive higher returns from hill broom business. Photo: RCDC.

Society (GCC) in 1956 for socio economic up-liftment of tribal communities in the state through intervention in NTFP; **Chhattisgarh** state government has established very efficient organization called Chhattisgarh Minor Forest Products Federation (CGMFPF) taking leading role in NTFP trade and enterprise promotion; **Odisha** government has two agencies OFDC and TDCC for NTFP procurement although it has transferred 69 NTFPs to panchayats, making the trade of these items free; and **Madhya Pradesh** with its MFP Federation has done the pioneering work on NTFP benefit sharing model in the country for the nationalized products, which has been evolved in last 40 years' time.

## **2. Regional, national, international dynamics and concerns emerged in the NTFP sector:**

NTFPs have remained unorganized not only in India but in other countries like Canada too, resulting in lack of proper assessment of their actual production/collection, procurement, dependent population, and trade transactions. Although few items like bamboo have relatively organized procurement and marketing thanks to the consistency in industrial demand, the picture regarding most of the NTFPs is rather grey.

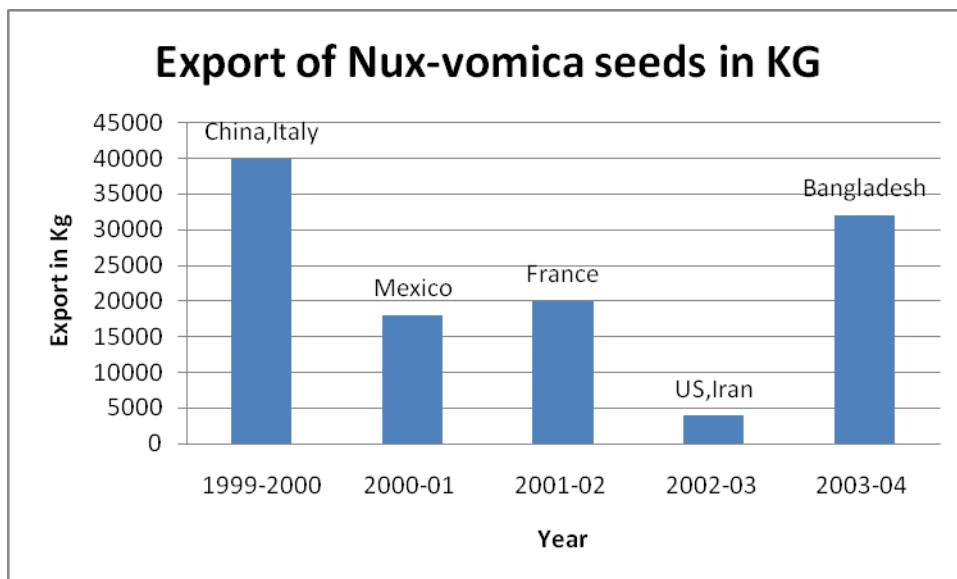
However, the potential of this sector alongwith its contribution to the livelihood of millions of poor and disadvantaged people across the world attracted international interventions, be it the NTFP-Exchange Programme in South Asia or IUFRO's exclusive sub-division on NTFP research and knowledge sharing. The Global NTFP Partnership Programme had even much broader objectives.

While globalization with economic liberalization increased the scope of accessing NTFP-based international market coinciding more or less with an increasing global demand for natural products, it also increased the competition with more emphasis on quality control and resource conservation (which is how certification became an important necessity). China could take much advantage of this global demand because of its centralized policy control and implementation mechanisms, whereas some other countries could ensure their better market share chiefly due to effective entrepreneurship. India neither had the centralized control nor the required extent of effective entrepreneurship. If it still secured its position in the global NTFP market then that



Figure 3: Lac. India has not been able to meet the current international demand of this NTFP because of under-harnessed potential. Photo courtesy: RCDC.

is partly because of the fact that like China it has a rich tradition of indigenous knowledge of NTFP-based health care products, and partly because many valuable NTFPs are produced here. Otherwise it lags behind when it comes to bamboo-based entrepreneurship of Taiwan or product standardization of the US. Fortunately, for natural reasons, India still remains No.1 in case of few items like lac because it is only here that the best quality lac is produced that too in substantial quantities. According to a study the Indian share of global medicinal plants trade is increasing at an annual growth rate of 23%, and India stood 3<sup>rd</sup> among the biggest exporters of medicinal plants during 2009 after China and Canada respectively (**annexure-1**)



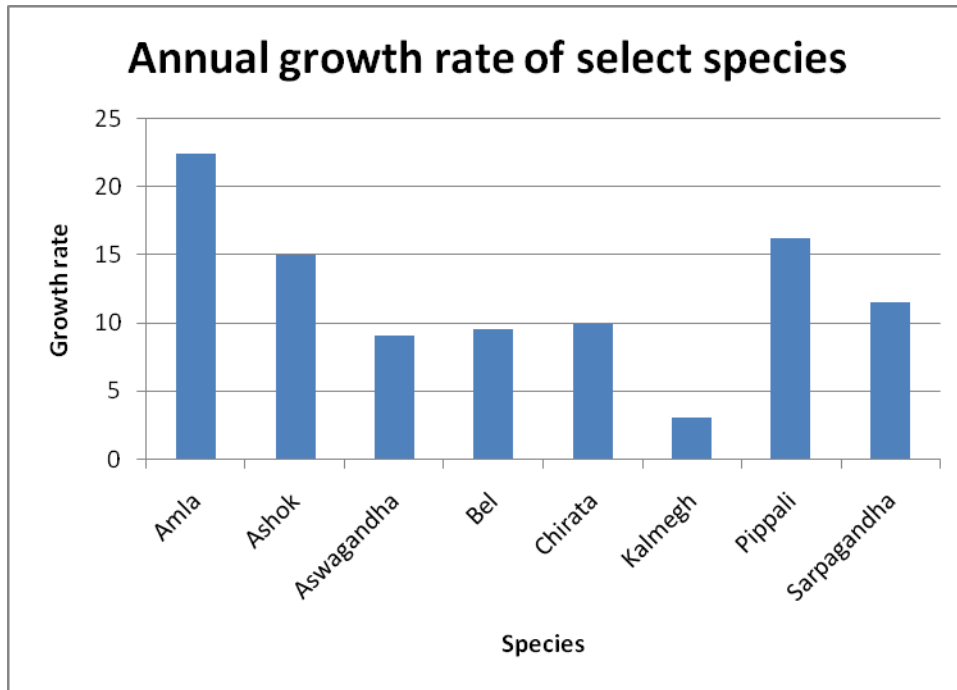
*Chart-1: An interesting projection of complexities in NTFP export. In case of nux-vomica seeds the importing countries kept on changing during 1999-2004 (based on DGCIS data quoted in Rath, 2005). Export ensures a substantially higher gain for the same quantity of an item than domestic trade, but is more vulnerable to collapse.*

Not only consumer demand but also political relations/situations sometimes affect the NTFP export. For instance, export of tendu leaf to two major importing countries, Pakistan and Sri Lanka, were adversely affected during the civil war in Sri Lanka and bad political relations with Pakistan (Rath, 2010).

Most of the raw drugs being sourced from wild, global demand further accelerated the unsustainable exploitation of some species like *Taxus baccata*, and *Swertia chirayita*. At the same time the CITES treaty restricted the export of highly procured by endangered species like *Rauvolfia serpentina*. On the other hand, it has also happened that synthetic substitutes adversely affected the domestic and export trade of many NTFPs like lac. Hence, it is a kind of mixed affair so far NTFPs are concerned.

Herbal raw materials from NTFP source contribute to 90% of the supply for the industry, which are practically sourced from natural forests. Of the 7000 plants used in Indian System of Medicine, 960 have been recorded in trade and 178 are traded in high volumes in quantities exceeding 100 MT per year. According to a study, a total annual demand of botanical raw drugs in the country for the year 2005-06 has been estimated as 3,19,500 MT with cross ponding trade value of Rs.1069 crores.





*Chart-2: Annual growth rate(demand) between 2001-05 of select NTFP species many of which are also cultivated commercially(based on TFRI 2011, table-4). Atleast four of them are endangered in wild due to unsustainable harvesting and inadequate regeneration focus.*

At regional level NTFP production and trade is largely concentrated in Central India with Odisha and Andhra Pradesh. Bamboo dominates in north-east while rare and valuable medicinal herbs are sourced in the Himalayan states. The south is focused on few items like tamarind and pongamia seeds, etc. though Kerala’s herbal tourism consumes a lot of and diverse medicinal plants. The states have their own policy on NTFPs though it is informal in most states. Many of them have procurement agencies for NTFP, but performance of these agencies have not been satisfactory due to a number of reasons like lack of professionalism, incompatible structural arrangement, etc.. The central-level procurement agency TRIFED’s performance has also been no better. Abolition of monopoly and deregulation of many items as per the mandate of PESA has been another important factor responsible for such poor performances.

Both government and non-government agencies have attempted to promote collectives of primary collectors in the form of SHGs, self-help cooperatives , and producer companies which, despite its little net achievement on the financial front, has given the NTFP collectors(who are mostly women) a new identity and self-confidence alongwith growth of an intellectual capital in them. They need more support and enabling mechanism to grow financially.

### 3. Gap analysis:

The NTFP sector has remained underdeveloped in comparison to its vast potential chiefly because of some of the serious gaps that have been existing since long, as under:

- **Gaps at policy level:** There is no national clarity at policy level on NTFP management. Stake in NTFP sector has been a major issue of confrontation between the Forest



Figure 4: Critical dependency on Mahua. Many state Forest Departments deregulated mahua collection & trade, but the Excise policy curtailed this freedom. Photo courtesy: RCDC.

Department and the local communities, particularly after PESA and FRA. Grey areas exist even in legal provisions, and access/transit regime is incompatible across the country. For example, bamboo as per FRA is a minor forest produce; but Indian Forest Act, 1927 treats it at par with timber and the Forest Department is not ready to lose its stake in bamboo. The then Minister for Environment & Forest Mr. Ramesh wrote letters

to state chief ministers to recognize bamboo as an MFP and transfer ownership of the same to local

communities accordingly in deserving areas; but the state forest departments are hardly willing to accept that. Monopoly rights of states are legally questionable though they still continue with that.

- **Gaps at production level:** While conservation and regeneration of NTFP species did not receive adequate attention in the timber-centric forest management system, unsustainable harvesting practices alongwith diversion of forest land for non-forest use caused substantial degradation of the resource base. Of late medicinal plants received some special attention which helped in promoting their commercial cultivation, but not the NTFPs as a whole.
- **Gaps at institutional level:** There is no central organization to coordinate NTFP-related matters, so there is an overlapping of concerned schemes/programmes and institutional activities. Further, procurement agencies at state- and central level lack adequate capacity and skill to successfully manage the trade affairs like private traders; and local institutions of primary collectors are often confronted with limited capacity versus uncertain market.
- **Gaps at management level:** NTFP management protocols are hardly available/developed. Making working schemes for bamboo is easy but not for other NTFPs because they are not so widespread/contiguous. Orissa and Kerala adopted some NTFP management guidelines, but overall achievement of the same seems to be poor. Moreover, there is a dilemma regarding ownership of communities, and even community forestry hasn't yet evolved to take up this challenge independently and effectively.
- **Gaps at market level:** The NTFP market is mostly unorganized in nature(except for few items like tendu patta or bamboo), and uncertainty in market demand makes it difficult to

survive with one or two items only. Lack of value addition (like, cleaning and grading) at primary level causes the primary supplier lose a substantial part of the possible income. Few items are almost exclusively dependent on export market due to unfavourable domestic policy(as in case of sal seed butter which can be used in Europe in chocolate making but not in India). Procurement agencies lack market intelligence to trade successfully. Monopoly rights save them, but such rights are legally contradictory in PESA and FRA areas whereas there is also an understanding that a kind of centralized and government procurement & marketing system is at present more preferable than total deregulation because the latter might ultimately go against the interest of the primary collectors(like, in case of tendu patta).

## **4. Issues and Challenges**

**4.1 High exploitation and poor regeneration-**Due to unrestricted collection, over use of products and unscientific collection, and also rapid deforestation for non-forest use, the natural availability of NTFP producing trees are less in number, and their regeneration in many forest areas has gone down. Number of productive trees is less in the forest which is how the overall production of NTFP has decreased whereas the demands have gone very high.

**4.2 Inadequate NTFP baseline data and mapping, unclear demand supply scenario-**For national level planning and management a reliable data base on NTFP is required which however is not available properly to determine the quantity available, collected, self- consumed, value added and traded, mature trees available and their production potential, per hector number of trees, etc.. Since NTFP collections are seasonal and may vary from year to year (though the average size of the dependent population may remain more or less the same for quite some time) it is difficult to provide demand and supply data until a dedicated system prevails. In different agro-ecological zones and specific forest types, mapping/inventorization through GIS system is to be developed.

**4.3 Poor attention to NTFP conservation-** In situ and ex situ conservation, identification of genotype and gene bank, application of biotechnology and genetic engineering are either paid less attention or totally absent in NTFP sector.

**4.4 Absence of sustainable harvesting protocols-** Sustainable harvest means ,“*the level of harvest at which a species can maintain its population at natural or near-natural levels and the harvest will not change the species composition of the community*’ . Understanding of sustainable harvesting is not an easy task, and suitable robust thumb rules are to be followed for different plant parts – roots, leaf, bark, flowers, gums & resin, whole plant etc. Sustainable harvesting protocols have not been developed for most NTFPs and whatever protocols are available remain unpracticed in many cases. Participatory ecological monitoring is required, so that local people may understand how much resource is available and how much is to be harvested sustainably.

**4.5 Unorganized sector-** Traditionally the whole NTFP sector, particularly its collection, trade and local value addition are managed in an unsystematic and unorganized manner. Gram sabhas and Panchayats were given some responsibilities for NTFP management but are still not

in a position to independently & successfully handle the overall management of NTFP. Ownership has not been defined in the concerned law. What the Haque Committee (MoPR) quoted can't be applicable to common property resources where the right to disposal has to be exercised in a manner justifiable to the society. State regimes widely vary. Same item may be free in one state and restricted in the other.

**4.6 Policy-level inconsistencies:** As stated earlier various states have got different management processes, procedures and control mechanisms for NTFPs, and that's because forest is a concurrent subject; but the concurrency has resulted in a kind of highly incompatible regime across the country thereby hampering the development of the NTFP sector. It is high time to develop a national policy, which can address the need of 275 million people related with this sector. There are many grey areas like ownership of Gram sabha in PESA areas over produce cultivated privately on trees on private land or community land, or rights of the Forest Department over NTFPs that are not traditionally collected by communities entitled under FRA outside PESA areas, which are to be addressed for clarity in a national policy.

**4.7 Inadequate infrastructure, and post-harvesting facilities/skills-** In most places in India neither the Forest Department nor the procurement agencies nor the Gram sabha/Panchayat nor



Figure 5: Machine stitching of siali leaf plates not only fetched better income but also gave a better self-confidence & identity to the women primary collectors. Photo: RCDC.

the institutions of primary collectors have proper storage facilities. Most NTFPs are biological and seasonal products; and several products being perishable require immediate disposal in absence of appropriate storage facility. This means that the primary collector is vulnerable to distress sale or sale at a low price due to lack of adequate storage facility. Further, lack of value addition deprives the gatherer of better gain. Some products like

lac, tassar, medicinal plant, several gums and fruits require cold storage while some like char seeds and kalmegh fail to provide the potential return without value addition.

**4.8 Volatile market-** NTFP market is highly diverse, and fluctuates quite frequently; hence interventions based on assumptions of market stability or expectations of stable/growing market often become non-viable commercially. This discourages private entrepreneurship in the sector so far commercial farming is concerned. Primary collectors and producers get the least share from their hard earned product, so there is a need of Minimum Support Price (MSP) from the government side.

**4.9 Adapting to Climate change-** Climate change is a global phenomenon that is affecting the phenology and the reproductive biology of various trees, shrubs and herbaceous plant species. Various research data suggest change in temperature and rainfall pattern affecting the NTFP production-both qualitatively and quantitatively (for example, lac), and which will in turn affect the dependent economy of the local people. Suitable strategies require understanding the level of vulnerability and adaptation measure in future. Mapping of vulnerability to NTFP

management and livelihood – change monitoring, bio-geographic region specific adaptation model require further understanding.

**4.10 Incompatible tax structure** - The present tax structure for many NTFP (tendu patta, lac, gum, mahua, medicinal plants, sal seeds, etc.) is incompatible across the country which needs to be restructured. VAT has been a matter of major concern for public sector procurement & trading agencies in NTFP who advocate for exemption of the same. In some cases imposition of both central sales tax and state sales tax even led to litigations.

**4.11 Inadequate capacity and knowledge in NTFP management**- Previously forestry trainings were mostly oriented towards timber, even community forestry was also timber-centric. As a result these conventional forest management systems are unable to meet the requirement of much broader, finer, integrated and complex challenges of the present era like biodiversity conservation and climate adaptation.

**4.12 Poor progress in research & development:** R&D is very much required to develop the NTFP sector, but there is very inadequate investment on the same. Some commercially important NTFPs like mahua and tendu leaf have only one market use which is why they are very much vulnerable to fluctuations in demand. There are many high volume NTFPs that either remain unsold or sold at a meager price due to absence of better marketability options. Unfortunately the research institutions have not been able to address these issues satisfactorily. Project-based approach along with bureaucratic attitude has made the scientists deviate from the spirit and vision of research. On the other hand NTFP silviculture has not developed much. Poor R&D focus has been partly responsible for under harnessing of the actual potential of the NTFP sector.

**4.13 Minimum Support Price (MSP) for NTFPs:-**

Procurement of collected products providing an uniform minimum assured price will immensely help the gatherers who are often exploited by the local level trader. Although NTFPs are not same as agricultural products, some of them (particularly medicinal plants) are cultivated too while others are vital to the poor forest dwellers, which is why MSP for NTFPs has been advocated for since long. It is also true that similar attempt has been made in the past in few cases/areas often with drastic financial results, but the experiences have also suggested that without

the government guarantee for compensation for the losses to be accrued (if any) and without a compatible policy regime (including tax structure) in the country MSP can't be successful or sustainable in the long run. The Ministry of Panchayati Raj had constituted a Committee on ownership, price fixing, value addition and marketing of minor forest produce under the Chairmanship of Dr. T. Haque, Member, Planning Commission. The Committee has submitted



Figure 6: To counter the decreasing priority of bamboo in the paper industry, its vast potential as a construction material has to be tapped and developed properly. A bamboo house stands near Shivpuri on Badrinath highway in Uttarakhand. Photo-UBFDB

its report in May, 2011. Just to start, the Committee has recommended for MSP for 14 (actually 16 to include all three myrobalans, vide note under annexure-3) minor forest produce initially. However, the mechanism for successfully implementing this recommendation is yet to be developed, while on the other hand the huge money required to pay the MSP on 16 items is yet to be assessed and ensured properly.

**4.14 Absence of complimentary mechanism for NTFP crop failures:** MSP can't help the primary collector in case there is a crop failure. Periodic crop failure is a natural phenomenon for many NTFPs, but climate change has increased the frequency. NTFP crop failure or bad crop severely affects primitive tribal groups and hunter gatherers, but there is no policy or mechanism to provide some support in such cases to the critically dependents.

#### **4.15 Underperformance of public sector procurement & trade agencies:**

TRIFED and state-level procurement & trade agencies have often underperformed in meeting their objectives partly because their structure is not much professionally and/or commercially viable, partly because they suffer from policy level set backs, and partly because they have to face unwanted and informal political and other interventions.

**4.16 Primary collectors losing interest in NTFP collection:** Uncertain market and reduced production followed by availability of more secured options like MGNREGS has reduced the interest of primary collectors (particularly males) in NTFP collection in many areas. This is similar to the labour crisis in agriculture, and is one of the reasons of underharnessing of the vast potential of the sector.

Priority should be given to the following challenges in the 12<sup>th</sup> plan:

- 1. Depleting resource base and its conservation/regeneration**
- 2. Unassessed resources and their inventorization**
- 3. Differential policy and its solution**
- 4. Inadequate skill & capacity at various levels on value chain development, and interventions for its solution**
- 5. Weak institutionalization, and its solution**
- 6. Poor R&D focus and its remedy**
- 7. Lack of special attention for critically dependent communities and areas**
- 8. Effective marketing linkages**

These are the broad areas where challenges are major, and interventions are necessary for the overall development of the NTFP sector in order to properly utilize its vast potential in socio-economic development of the disadvantaged people and areas. Volatile market is one of the major challenges but the government is not supposed to totally control the market as that would be unsustainable in many ways. However, the government can create enabling mechanisms that reduce this volatility atleast for some species, and enhance the resilience of the primary collectors and their institutions to withstand the adverse impacts of market dynamics.

## 5. Strategy

The NTFP management on sustainable basis has remained a complex process for the last several decades but in the present scenario, there is a need to adopt multipronged strategy, as under, to build up an environment to strengthen community based management and trade of NTFPs which in turn would strengthen the livelihood of poor forest dependant population:

- **Resource Augmentation Plan /incentives for growing NTFP crops in private land:** Due to unrestricted & unscientific collection and over-use of products the NTFP resources have greatly been depleted in past years while their regeneration in many forest areas has gone down. Special effort is required for reducing the pressure on forest by cultivating selected species outside forest areas and undertaking intensive conservation of existing forests supported by ANR and other conservation activities. The increased production thereby would not only reduce the gaps between demand and supply but also shall become the ground for sustainable NTFP development.

- **Detailed inventory and prioritization of zone-wise species:** India has got very rich biodiversity. Hundreds of NTFP species are of medicinal value, and are in active trade. While the knowledge and data base on all species are needed, a gradual process of understanding and developing management programme would be appropriate and therefore, there would be a high need of zone wise inventory and prioritization of the various NTFPs.

- **Forward and backward linkages /Organisation of existing trade:** There is a need to involve financial institutions to promote community based micro-enterprises with clear benefit sharing mechanisms. Involve financial institutions like NABARD and other public sector banks in NTFP enterprise development. Just as they have a target for Small and Medium Enterprises in the industry sector, similarly, this approach can be customized towards Small Forestry



Figure 6: Weaving Himalayan Nettle (*Girardinia diversifolia*), a natural fiber species found in the upper reaches of Himalaya. Hands weaving the potential fibers in district Chamoli of Uttarakhand. Photo-UBFDB

Enterprises. In such effort PPP model must be developed which may help achieve the objectives of private sector involvement for bringing technology and capacity in the remote areas.

- **Capacity development training, awareness building, exposure:** Skill/capacity development is very important for the foresters(particularly the sub-ordinate field staff) to successfully face the emerging challenges of accommodating community rights in forest conservation, ensuring biodiversity conservation, and managing climate change. At the same time, complimentary facilitation should be made for

forest protecting /forest managing communities too in the form of NTFP management protocols. Trainings to primary collectors, processors, and traders, and also to the front line staff require basic and advance training to build their confidence.

- **Food security and income generation for poverty alleviation:** For empowerment of community and sustainable forests a symbiotic relationship between forests and forest dwellers must be maintained in order to provide food security for forest dwellers and income generation for the poor population. Women are mostly dependent on NTFPs due to the nature of its production, quantity, collection procedure, processing and local selling. Therefore, in order to improve upon the subsistence level, programmes supporting to ensure food security would be required with specific concern for the landless, hunter gatherers and primitive tribes.

- **Research and Development:** More revolutions in the NTFP sector are possible through successful R&D initiatives like that of Sal seed in 1950s. Special R&D drive is required to develop marketability for low value and high volume items, and also for alternate marketability for presently single market items. R&D focus is also necessary to develop NTFP silviculture, sustainable harvesting protocols, low-cost and user-friendly (preferably women-friendly) value addition techniques and processing machines, eco-friendly and safe storage methods, and methods for using otherwise waste biomass in forest.

- **Establishment of an apex body for NTFP development:** The overall development of NTFP sector, despite its vast potential, has not been a priority in the past. To develop the NTFP sector in a holistic way by coordinating/guiding various government sponsored activities/programmes on the same alongwith managing the knowledge, developing package and practice, ensuring capacity development of stakeholders and providing overall guidance over the NTFP sector, an apex & autonomous agency like the Rubber Board or Spice Board would be very much required. This agency may be called the NTFP Development Board, and can have its state offices/branches.

## 6. Recommendations

The recommendations for overall development of NTFP sector are based on the following approaches:

### 6.1 Resource augmentation through *in-situ* plantation and ANR / *ex-situ* cultivation (ha)

One of the important strategies for resource generation is conservation, development and harvesting (CDH) methods which is an integrated approach from conservation and production to the end use. Undertaking *in-situ* conservation measures for NTFPs including protection and Assisted Natural Regeneration (ANR) to reduce resource depletion and reviving endangered NTFPs is urgently required. Special attention would be paid on providing food security to forest



dwellers and people living in the forest fringe areas, apart from income generation of these communities from NTFPs. Additionally cultivation/propagation/plantations of NTFP would be promoted on different land types including Reserve forests, Protected forests, village forests/ Van Panchayats, gram panchayats, Jhum sites in north east India, absentee's land and even in the private land types, to reduce the gap in demand and supply. Further, plantations for industrial purpose will be encouraged for industries provided that doesn't create ecological concerns and also doesn't divert productive land for non-food crops. To promote cultivation of NTFPs in private land types, absentee/fallow land types, and degraded land types etc., incentives / support would be provisioned in the ratio of 75:25. Similar incentives would also be given in axal affected and mountain **areas of the country**. **For all activities of ANR**, nursery raising, plantations, and tissue culture etc. an amount of Rs. 2500 Crore has been envisaged for the conservation and augmentation of NTFP resources over (6.35 lakh ha at the average rate of Rs. 40,000/ha) under 12<sup>th</sup> five year plan. However, the target area can be substantially increased with the same investment through reduced per hectare cost with community involvement and improved silvicultural practices.

## 6.2 Identification, Prioritization, Standards, Certification and Value Chain Development, Infrastructure / Enterprises/ Marketing/Minimum Support Price

NTFP sector is still unorganized. There are no comprehensive studies available on most of the NTFPs. Only few species are recognized and traded on regional basis while no or a little centralized data is available for them. With action oriented research, their value can be increased manifold as in case of chir-pine needle, lantana and other underutilized NTFPs, etc.

### CHIR , ONCE A PROBLEM , NOW A PANACEA – The Uttarakhand Story

In Uttarakhand, the uncontrolled burning of dry Chirpine (*Pinus roxburghii*) needles, locally called as *pirul*, used to cause a wide spread damage to the forest and environment. Chirpine trees shed a huge lot of leaf biomass that is underutilized and is often a cause of forest fires each year. The estimated volume of this litter is approximately 2 million tons per annum. Uttarakhand Forest Department invited proposals from the commercial firms in 2009 to purchase pine needles from the local people at a minimum rate of ₹1 per kg with a token amount as royalty. As on date five firms have come forward for making fire briquettes out of the collected needles, and utilizing the dry needles for generating power. This whole exercise has generated local employment opportunities and has been successful in controlling of forest fires.

Underutilized or unutilized biomass can be converted to commercial products without harming the ecosystem. Several examples are there like- *Nyctanthus (Harshringer)* from forest twigs used for basket making in Sheopur district of M.P.; Lantana based furniture; karanj and neem seed waste used as commercial organic manure; etc. A first-hand knowledge towards the identification of species should be available at a centralized place. Then prioritization of these species has to be done on a zonal basis for the country following which in a much more focused way the states can have their own choice of zonal specifications within the state depending on local market trends. The knowledge and data base on all species, however, are needed but a gradual process of understanding and

developing management programme would be practical. Importance would also be given to those species which come under RET (rare, endangered and threatened) categories. For each

prioritized species value chain analysis and development would be carried out followed by need based infrastructure development, processing facilities, standardization, certification, enterprise development, arrangements for working capital / loans etc. The subject of Certification is emerging very fast and promotion of certification of NTFPs including medicinal and aromatic plants has many direct and indirect benefits. Works initiated by some of the national institutes such as IIFM in this regard can be taken as a bench mark and the Ministry of Environment & Forests can take forward the initiative to have a proper mechanism in place for NTFP product certification which, unlike timber certification, has been a difficult and complex matter till date. An amount of Rs. 1000 crores has been proposed for this purpose.

While Minimum Support Price is a need of the hour, a preliminary estimate suggests that MSP on all the items suggested by Dr. Haque committee may cost Rs.4000 crores to Rs.5000 crores annually. However, since it is expected that in case of some of these NTFPs (like, honey, tendu patta, and lac) the traders are likely to offer higher prices than the MSP and hence are likely to procure those items instead of the government, and also that initially MSP may be considered on a priority basis for those items that do not have an assured market price at present (like, chebulic and belliric myrobalans); a minimum amount of Rs.2000 crores has been proposed for this purpose in the 12th Plan though a substantially higher allocation may definitely be required to fully implement the recommendations of the Haque committee. .

Thus, total Rs. 3000 crores has been proposed for marketing support and related activities.

### **6.3 Awareness, Social Mobilization and Capacity Development**

Farmers, community institutions, line departments, project staff and other stakeholders shall have to be trained. For a wider social mobilization intensive awareness campaign would be required along with National and International exposure visits, exhibitions and other capacity development measures. The capacity of the rural communities in the NTFP sector is very weak. Concentrated efforts are required to build capacity of primary forest produce gatherers, officials of forest department, and executives of government procurement agencies on different aspects NTFP management, processing and marketing. Similarly, knowledge of the available models of sustainable harvesting like Tej pat (*Cinnamomum tamala*) collection in Uttarakhand, honey collection in Tamil Nadu, lac collection in Chhattisgarh, satabar collection in Madhya Pradesh and broom grass collection in Meghalaya are to be well disseminated through exposures and/or on spot training by experts and user-friendly IEC materials. An amount of Rs. 250 crores has been proposed for this purpose.

### **6.4 Research and Development**

Research and Development activities in the past were more or less timber centric. Except for few NTFPs like lac, resin, tendu patta, etc. most have been ignored even though they are highly exploited. There is a need of action oriented R & D in areas of developing new/alternate marketability particularly for low value & high volume NTFPs on the basis of a special drive, post harvesting, semi processing, genetics, management, nursery, plantation, collection, storage,

chemical analysis for useful contents, etc. Research is required on biological, social, trade and market, and economic dimensions. Special emphasis can be given on research over natural fibers, aromatic plants, unutilized/underutilized biomass, and weeds, etc. An amount of Rs. 290 crores has been kept for the same.

## **6.5 Enabling policy & institutionalization**

An autonomous organization on NTFP development, similar to Coir Board or Rubber Board, is proposed to be created under the Ministry of Environment & Forests with state level units, and with various goals and responsibilities (**annexure 4**). However, its basic function would be to look at the overall development of the NTFP sector at the national level and take care of the research needs, capacity building needs, publications, documentation, package of practice, etc. Apart from this, there is a need for compensatory provisions in case of NTFP crop failure, favourable taxation regime including exemptions, and special schemes for left-wing extremism affected areas, mountain areas, and NE regions. For such purposes an amount of Rs. 550 crores has been proposed under the programme.

Accordingly, the **recommendations** have been categorized and outlined in the following way:

### **✚ Resource Management**

1. Conservation of all genotypes including RET species, Development and Sustainable Harvesting with locally feasible models of community participation like People's Protected Areas in Chhattisgarh in deserving areas.
2. Resource augmentation and development
3. A zone wise GIS-based inventory of availability, cultivation status, demand and supply for NTFPs
4. Zone wise species prioritization and selection for conservation, development and harvesting (CDH) of important NTFP species
5. A cluster based approach after few successful pilot initiatives, for further development of NTFPs
6. SFM including revision of Working Plan Code, Certification and CBNRM.

### **✚ Marketing**

1. Minimum support price (MSP) for NTFPs.
2. Mechanism for market intelligence and information system.
3. Efficient Certification system for improved trade .
4. Revolving Fund or similar financial support to primary collectors and their institutions.
5. Value chain development by aggregation, primary processing, grading, branding and certification.

6. Eco- services of NTFP such as herbal ecotourism and local enterprise development.
7. Encourage corporate sector involvement- contract farming, infrastructure development, resource augmentation.

### **Capacity Building and IEC**

1. Formation and strengthening of local institutions-SHG, FPCs, VPs etc.
2. Special training of front line staff and ToT.
3. Strengthen & restructure existing institutions, particularly public sector procurement & marketing agencies.
4. Modular training for primary collector, grower, entrepreneurs and traders.
5. National and International exposure visits of relevant stakeholders.
6. User friendly IEC material.

### **Research and Development**

1. Strengthening existing potential National/State R&D institutions.
2. Undertaking state of art research on NTFPs, including nationally coordinated projects, collaborative projects.
3. Prime focus on developing new/alternate marketability for single market NTFPs, low value high volume NTFPs, silviculture and conservation biology of NTFPs.
4. The concept of Payment for Ecosystem Services (PES) needs to be tapped in future.
5. Study on impact of non-anthropogenic factors like climate change.

### **Enabling Policy and Institutionalization**

1. Adopt a national level comprehensive policy on NTFPs
2. Convergence of schemes implemented by different Ministries.
3. Establish an apex body such as NTFP Development Board like Rubber Board or Spice Board.
4. Empowerment and strengthening of local institutions such as Gram Sabha, JFMC, Van Panchayat, primary cooperative societies, LAMPs and other procurement agencies.
5. Ensure better Access and Benefit sharing mechanism with necessary legal provisions.
6. Introduce compatible and uniform tax structure & transit rule, exempt VAT and introduce cess system in deserving cases.
7. Provide special compensatory support like additional quota in PDS, for NTFP crop failure, particularly for primitive tribals, hunter gatherers, etc..
8. Introduce new schemes for NE region, mountain areas and Left Wing Extremism (LWE) affected states.
9. Ensure integrated and compatible policy environment for NTFP development(like, to promote eco-friendly sal- and siali plates, ban or heavily tax the market competitors of the same like thermocool and polythene coated plates which are not eco-friendly; mandate consumption of natural tan stuff like harra particularly along the bank of

- Ganga as a part of the Clean Ganga Project; allow cocoa butter equivalent from NTFPs in chocolate making; etc.)
10. Make scientific names of species mandatory in all official communications and reports so as to avoid confusion, overlapping, and repetition.

## 6.6 Proposed Budget for 12<sup>th</sup> Plan

Sl. No.	Proposed Activity	Total Budget (Crore Rs.)	Year Wise Budget (Crore Rs.)*				
			Year 1	Year 2	Year 3	Year 4	Year 5
1	<b>Resource Management</b> (Resource augmentation through <i>in-situ</i> conservation and ANR / <i>ex-situ</i> cultivation [ha])	2500	250	750	750	500	250
2(a)	<b>Marketing</b> (Value Chain Development, Infrastructure/ Enterprises)	1000	100	300	300	200	100
2(b)	<b>Minimum Support Price [MSP]</b>	2000	400	400	400	400	400
3	<b>Capacity Building &amp; IEC</b> (Awareness building, Social Mobilization, National/international exposures and Capacity Development)	250	25	75	75	50	25
4	<b>Research &amp; Development</b>	290	35	80	80	60	35
5	<b>Enabling Policy &amp; Institutionalization</b> (Setting up of National NTFP Development Board with state centres, M & E Documentation, Manuals, Networking, Outreach, Administrative, compensation for NTFP crop failure, etc.)	550	100	100	150	100	100
	<b>TOTAL</b>	<b>6590</b>	<b>910</b>	<b>1705</b>	<b>1755</b>	<b>1310</b>	<b>910</b>

\* A 10% escalation in base rates would be applicable from year 2013-14 onwards.

## 7. Monitoring & Evaluation mechanism:

M&E can be and has to be done in the following ways:

- a. **Technical monitoring:** Technical monitoring is necessary to compare the baseline information with special efforts during the 5 year plan so that on the basis of quantifiable monitoring indicators the technical outputs are ensured. Ecological Monitoring at regular and required intervals can help monitor the status of NTFP species and production potential. Technical monitoring can be undertaken by potential Government and non Government institutions of the country.
- b. **Commercial monitoring:** The main purpose of such monitoring could be to qualify the domestic as well as exports figures in comparison to the 1<sup>st</sup> year of the plan.
- c. **Social monitoring:** This can be ensured with proper training to stakeholders along with imparting the training to communities and their institutions like Gram sabha so that the socio-economic aspect of the NTFP sector flourishes properly.
- d. **Institutional monitoring:** The potential institutions can be involved in the monitoring system that can help in monitoring the status and trend of the NTFP sector.
- e. **Financial Monitoring:** In order to have effective financial discipline it is necessary to ensure internal and external auditing system. Keeping in view the quantum of budget special audit by CAG is also recommended.

On the basis of all above monitoring mechanisms, evaluation of the whole sector can be assessed on yearly basis with reference to the targets set and achieved of the year and subsequently for 5 year plan. Midterm review is also proposed for critical analysis and if necessary, modify the future strategy for the remaining period of the plan. Ultimately in the final year of the programme it is strongly recommended to prepare an exit plan for sustenance of the sector that could ultimately lead to learn lesson during the plan period and further improvement in the next five year plan.

## 8. Expected Outcome

NTFPs support poverty alleviation due to their collection & sales by the poorest of the population who lack land, skills & even education. Most of these communities are forest dwellers and the ones who live around forests. The sector is mostly unorganized and lack basic infrastructure for storage, processing and transportation. There is no exclusive body to control and develop the NTFP sector in the country though there are few agencies taking care of only a

part of the responsibility (like, procurement and trading). With the creation of an apex body new avenues of international cooperation can also be explored such as linkage to the Global Partnership Programme on NTFPs (NTFP-GPP). With implementation of the suggested efforts and an investment of Rs. 6590 crores in 12<sup>th</sup> five year plan, approximately 10 crore workdays are expected to be generated for the rural community during their implementation in the 12<sup>th</sup> plan and about 2 crore workdays thereafter in a sustainable manner. Augmentation in production areas would ensure availability of material for promoting green industries and leading to an increased economical growth and ultimately green Gross Domestic Product (GDP) for the nation that ultimately fulfills the Millennium Development Goals (MDGs).

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## Section-C

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## Section-D

### Annexure- 1

#### Exporter countries of Medicinal Herbs of the world (in million US\$)

Rank (2009)	Country	2007	2008	2009	CAGR (2005-2009)	% Share (2009)	Cumulative % Share
1	Canada	142.51	58.72	224.73	25.58%	14.14%	14.14%
2	China	334.62	219.07	193.33	23.99%	12.17%	23.31%
3	India	73.44	50.44	105.91	20.09%	6.67%	32.98%
4	Singapore	117.63	33.61	94.82	-10.22%	5.97%	38.94%
5	China, Hong Kong SAR	212.37	95.47	86.65	-.36.12%	5.45%	44.40%
6	USA	152.24	168.02	79.44	-27.76%	5.00%	49.40%
7	France	50.01	77.22	71.51	149.58%	4.50%	53.90%
8	Germany	72.65	93.76	68.07	-3.20%	4.28%	58.18%
9	Japan	77.81	139.83	66.74	-7.39%	4.20%	62.38%
10	Spain	39.76	35.84	47.04	8.77%	2.96%	65.34%
	<b>Grand Total</b>	<b>1791.92</b>	<b>1653.00</b>	<b>1588.93</b>	<b>-5.83%</b>		

Source: UN Trade Statistics Database 'Comtrade'

### Provisions on NTFPs in different laws and schemes

- *Ownership of NTFP, Rights and Concession* –PESA, 1996; Forest Rights Act, 2006;Wildlife Protection Act, 1972 with amendments; Supply of Bamboos to Artisans Including Co-operative Societies (Orissa) Rules, 1980; JFM resolutions/directives
- *Benefit Sharing Arrangement/Mechanism* – Biological Diversity Act, 2002; JFM directives/resolutions; Tendu Patta Adhinyam, 1964; Sal Seed Vyapar Vidhinyam, 1969 for trading of Sal Seeds, Nistar policy in MP.
- *Nationalization and Deregulation* – Orissa Forest Produce (Control of Trade) Act 1981; NTFP Procurement and Trade Policy, 2000; FRA, 2006; GCC, 1956 in A.P.
- *Conservation and Production-* NCA, 1976; NFP, 1988; JFM directives/resolutions; NAP, 2000; NMPB, 2001; BCA, 2002
- *Role of Panchayat*–PESA, 1996, JFM, 2002, FRA, 2006, Orissa Minor Forest Produce Administration Rules, 2002, NTFP Procurement and Trade Policy, 2000; JFM resolutions/directives
- *Sustainable Harvest and Non-Destructive Harvest* – NFP, 1988; JFM, 2002; MP State Forest Department spl. order for non-destructive collection, 2005.
- *Restriction on Negative Trade List* – Biodiversity Act, 2002; Indian Forest Act, 1927; Forest Conservation Act, 1980; Wildlife Protection (Amendment) Bill, 2010
- *Institutional Framework Strengthening* – NCA, 1976; NFP, 1998; JFM, 2002
- *Marketing Linkages* – NCA, 1976; Formation of MP MFP Federation, 1984 ; JFM, 2000; JFM, 2002; NTFP Procurement and Trade Policy, 2000; GCC 1956
- *Transit Policies* – The Orissa Timber and Other Forest Produce Transit Rules 1980; NTFP Procurement and Trade Policy, 2000
- *Capacity Building* - JFM, 2002; NAP, 2001
- *Pricing and Taxation*– Sales Tax; VAT; Forest Development Tax; Education Cess; Royalty; Commercial Tax, NTFP Procurement and Trade Policy, 2000, Bihar Orissa Excise Act, 1915, Schedule of Rate of Forest Produce In Orissa Rules 1977,
- *Domestication and Commercialization* – MGNREGA, 2005; SGSY, 2002; FCA, 1980; NAP, 2001; NMPB, 2002
- *Processing and Value Addition* – Available under various schemes of NMPB, Bamboo Mission, Horticulture Mission, FDA

## Identified list of potential NTFPs (for Enterprise Development)

Sl. No	North Himalayan zone	North-Eastern Zone	Central Indian Zone	Southern Indian Zone	Western Indian Zone
1	Tejpatta	Broom grass ( <i>Thysanolyne maxima</i> )	Tendu leaf*	Cinnamon bark	Tendu leaf
2	Jatamanshi	Bamboo*	Sal leaves	Mahagli ( <i>Decalepsis spp.</i> )	Bael
3	Tulsi	Phrynium leaf	Chironji*	Karanj seeds*	<i>Buchanania lanzan</i> (Chronji)
4	Jhula (Lichens)	Tejpatta	Lac*	Tamarind*	<i>Boswellia serrata</i> gum
5	Kutki	Orchids	Tamarind	<i>Bauhinia vahlii</i> (Siali leaf or Mahul patta)	Guggal gum ( <i>Commiphora wightii.</i> )
6	Texus(Thun	<i>Acquularia sp.</i> (Agar)	Sabai grass	Sandal oil ( <i>Santalum album</i> )	Bahera*
7	Chirata	Ashoka bark	Kalmegh	<i>Garcinia indica</i> (Kokam)	Harra*
8	Reetha	Cinchona	Mahua seed* and flower*	<i>Asparagus racemosus</i> (satawar)	Chrota seed* ( <i>Cassia tora</i> )
9	Moss ghash	<i>Taxus baccata</i>	Sal seeds*		<i>Mahua flower, seed oil</i>
10	Pine resin	<i>Swertia chirata</i>	<i>Siali leaves</i>		
11	<i>Picrorhiza kurroa</i> (Kutki)	<i>Litsea glutinosa</i>	Anola*		
12		<i>Andrographis paniculata</i> (Kalmeg)	Kullu gum*		
13		Cane ( <i>Calamus spp.</i> )			

14		<i>Parkia speciosa</i> (tree bean)	Hill broom grass		
15			Salai gum		
16			<i>Litsea glutinosa</i> (Maida bark)		
17			Arrowroot  ( <i>Curcuma angustifolia</i> )		
18			<i>Rauvolfia serpentina</i>		
19			Honey*		
20			Tassar		
21			Bamboo		

\*Items suggested by the Haque committee for MSP, alongwith neem seed

## **Role of NTFP Development Board at Central and State level**

- Development, coordination and control of the NTFP policy & programme at the national level and/or state level.
- Maintaining a thorough data base of NTFPs and related activities.
- Implementing use of NTFP based GIS and MIS systems for planning and monitoring.
- Implementation of sustainable NTFP harvesting practices including domestication/cultivation for regular supply of products and improved livelihoods of forest-dependent communities through establishment of NTFP based model nurseries and large scale plantations.
- Publications of various forms in local and other languages to support trainings, awareness campaigns, exhibitions etc.
- Trainings, capacity development, handholding, design and development.
- Providing expertise of different levels and guidance to the central/state government on NTFPs.
- Lobbying and visibility enhancing outreach measures including organizing international seminars, participation in relevant events, dedicated website, network development and policy advocacy.
- Providing directions on conservation, collection, cultivation and production of different NTFPs.
- NTFP based value addition, pricing and marketing.
- Set up growers and industrial consumer tie ups, market research and development.
- Facilitating research through relevant research institutions under ICFRE, CSIR, and Universities etc.
- Formulating a trade channel with consensus, and ensuring a level ground for sale/purchase so that primary producers and gatherers get their share of much higher returns.
- Carrying out in collaboration with other agencies like BSI etc. periodic survey, categorization and preparation of state of state of NTFP report.
- Adopting M&E system including an online monitoring system CPM & MIS (Computerised Project Monitoring & Management Information System).
- Documentation of processes, techniques and information.
- Strengthening legal capacity, legal reforms and institutional arrangements.

### Scope of convergence of Schemes

<b>State Programmes</b>	<b>Central Programme and Schemes</b>	<b>International Programme</b>
Externally Funded Forestry Projects (WB, JBIC, DFID)	NAEB/FDA/ JFM CAMPA Fund Greening India/ NAP	CCF II, UNDP and GoI- Country cooperation fund II
State Forestry Plan	National Biodiversity Agency  MoTA sponsored projects	Biosphere and livelihood programme (near National Parks and sanctuaries)
Rural Livelihood Programme	National Medicinal Plant Board- Commercial and Promotional scheme	Other Such Schemes DPIP, WFP – National and International Funding Agencies Assisted
Rural Development and Panchayat	TRIFED scheme in Tribal areas	UNFCC, SFP, UNDP, GEF
Tribal Development Corporation	MNREGA: Employment related to forestry activity can be linked	JICA sponsored Projects in 19 states of India
NGOs involvement	Bamboo Mission, Bio fuel Mission	DFID, DIDA, FAO, EU
Working Plans	Desert Development Programme, DPAP	GTZ/ GIZ

### Composition of the Sub Group II on NTFP and its Sustainable Management

In the first meeting of the Working Group on Forestry and Sustainable Natural Resource Management held on 25.07.2011, it was decided to constitute five Sub- Groups under the Working Group. The composition and Terms of Reference of the Sub-Group II on Non Timber Forest Produce is as follows

S. No.	Name of Member	Designation
1.	Dr. R.B.S. Rawat, PCCF, Forest Department, Uttarakhand	Chairman
2.	Sh. A. K. Singh, MD, Chhattisgarh Minor Forest Produce Federation, Raipur Chhattisgarh	Co-Chairman
3.	Sh. S. K. Panwar, CCF and ED, MPMFP Federation, Madhya Pradesh	Member
4.	Dr. B. T. Rao, Addl. PCCF & MD, Girijan Cooperative Cooperation Ltd., Visakhapatman, Andhra Pradesh	Member
5.	Shri. S. T. S. Lepcha, APCCF, Uttarakhand	Member
6.	Shri Balaprasad, CEO, National Medicinal Plants Board, New Delhi	Member
7.	Representative of Ministry of Tribal Affairs	Member
8.	Representative of Ministry of Panchayati Raj	Member
9.	Representative of Ministry of Rural Development	Member
10.	Representative from National Bamboo Mission	Member
11.	Sh. Bikash Rath, Regional Centre for Development Cooperation, Bhubaneswar, Orissa – 751007	Member
12.	Sh. Utkarsh Ghate, Director, Covenant Centre for Development, North India HQ., 2/25, STR Complex, Dulgcity, Chhattisgarh	Member
13.	Sh. Prodyut Bhattacharya, Professor, University School of Environmental Management, Guru Govind Singh University	Member
14.	Sh. D. D. Sharma, Joint Secretary, AYUSH	Member
15.	Representative from FRLHT, Bangalore	Member
16.	Sh. A. M. Singh, DIG (SU), Ministry of Environment & Forests	Member Convenor

## **Terms of Reference for Sub-Group II on Non Timber Forest Produce**

To make recommendations for the Natural Resource Management for the Twelfth Five Year Plan based on a review of the existing programmes, policies and issues related to Legislation, Enforcement, Infrastructure and Institutional Mechanism;

1. Recognizing the symbiotic relationship between forest and forest dwellers, integration of poverty alleviation schemes, gainful employment generation programmes with due empowerment of communities particularly tribal population and women, including imparting special programmatic and policy focus on development and sustainable harvesting and use of medicinal plants, bamboo and canes and other Non-timber forest produce (NTFP) resources
2. Identify thrust areas for Natural Resource Management, viz., NTFP, sustainability, livelihood of Forest Dwellers, and eco-services. Assess current and emerging issues for integration with other sectors and recommend remedial measures and mechanisms;
3. Optimizing productivity of forests, reducing demand and supply imbalances, rationalizing export and import regulations for improving opportunities for marketing of NTFP (Non-Timber Forest Produce) and promoting efficient and quality value addition to forest produce collected by the communities.
4. Suggest mechanism for capacity building of all stake holders for Management and Planning for conservation and sustainable harvesting of NTFPs, Marketing & Trade, and developing institutions.