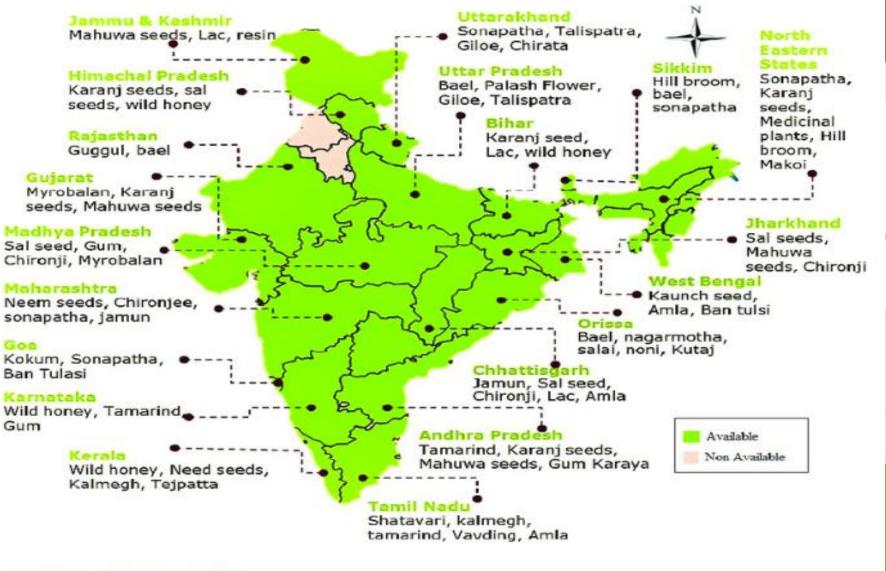
NON TIMBER FOREST PRODUCE DIVISION SFRTI RAIPUR CHHATTISGARH

Presented by SWAPNIL SINHA (JRF)

NON-TIMBER FOREST PRODUCES



State-wise availability of NTFPs



- Develop sustainable harvesting methods for MAPs & ntfp.
- Phyto-chemical evaluation of various medicinal plants for their sustainable utilization and value addition, conserving the biodiversity and improving income generation.
- Develop post harvest techniques for important NTFPs(primary processing, grading, value addition, preservation and enhanced shelf life. processing, marketing).
- Agroforestry resource centre- Agroforestry cluster formation (aonla, imli, bael, chironji, jamun etc).
- Data bank and value chain analysis of minor forest produce species .
- Conduct Core and long term studies on value addition to NTFPs .
- Bamboo information centre-status, identification, propagation, conservation, utilization, value addition, marketing, value chain analysis and training.
- Develop NTFP Resource centre along with climate change issues.
- Conduct Seminars/Symposia/Conferences/workshops/webinars etc.
- Conduct parataxonomist training for frontline staff and field volunteers and tribals.
- Collaborative research work with the help of expert institutes.

s.no	Related research work / Project	Adopted Methodolgy	Research Priority for SFRTI
1	 Developed techniques for alternative uses of inferior woods and biomass residue. Focused on sustainable harvesting methods for MAPs Worked on bamboo management and explored value-added products like charcoal. Dr. Jyoti Singh(Senior Research Officer and Division In-charge) Email-jyotisengar@icfre.org 		 Collect and analyse market data for forest products and NTFPs. Focus on sustainable harvesting methods for MAPs
2	 Phyto-chemical evaluation of various medicinal plants for their sustainable utilization and value addition, conserving the biodiversity and improving income generation. Sh. Suryanarayan Murthy Scientist B , snmmidde@icfre.org 2729161 To screen and identify the flora for various NWFP's. To develop technologies for enhanced gum production. Sh. Deepak Kumar Sc-B, deepk@icfre.org 2729164 		 To screen and identify the various NWFP's. To develop technologies for enhanced resin and gum production from Chhattisgarh. Phyto-chemical evaluation of various medicinal plants for their sustainable utilization and value addition, conserving the biodiversity and improving income generation.

sno	work	Prominent scientist	Research priority for SFRTI
3)	 •Forest Product Utilization Studies on non-timber forest products, wood preservation, and medicinal plants. •Climate Change Studies Assessment of climate change impacts and development of mitigation strategies. •Education and Training Offers postgraduate, doctoral programs, and training for forest officers and scientists. 	 Dr. Laxmi Rawat(Sc- F, Forest Ecology and Environment Conservation) Mo- 9818193810 Mr. R.S. Bhandari (Retd. Scientist, Forest Entomology) Mr. Jawaid Ashraf (Scientist B, Statistics and Research Methods 0135-2224896 Dr. B.P. Tamta(Scientist E, Non Wood Forest Products) 0135- 27568447 	•Study on NTFP and MAPs •Conduct training for forest officers and scientists, stakeholders,tribals etc
4)	 •To undertake & promote forestry research, education & extension leading to scientific & sustainable management of forest resources. •To provide technical assistant & material support to states, forest dependent communities, forest based industries & NTFP growers & other stakeholders in their forestry based programes for conservation & sustainable use of forest resources. •To develop appropriate cultivation, harvest & post harvest techniques for important NTFPs. 	•Mr. Subhash Chandra (Sc-D, Forest management)	 Provide technical assistant & material support to states, forest dependent communities, forest based industries & NTFP growers & other stakeholders in their forestry based programes for conservation & sustainable use of forest resources. Develop appropriate cultivation, harvest & post harvest techniques for important NTFPs. Core researches on NTFP & cash crops of forest origin.

S.No.	Work	Prominent Scientist	Reaearch priority for SFRTI
5)	 Core researches on value addition to NTFPs. Tissue culture of important species. 		 Conduct Core researches on value addition to NTFPs. Tissue culture of important species. Documentation of NTFP based plants and animal products diverse range and their socio economic importance(medicinal plants,lac,gums,resins etc)
6)	 Undertakes research on long-term research Collates, organise, analyse and present updated databases on forest resources Conducts Seminars/Symposia/Conferences and brings out the collated information 	•Dr. R Jayaraj_(Principal Scientist) NTFP Division KFRI Mo-914872690147	Organising research and extension programmes for mahua,sal seed,khair,chironji ,aonla etc.

S.No.	Work	Prominent Scientist	SFRTI
7) 8)	Non Timber Forest Products (NTFPs) for Sustained Livelihood: Challenges and Strategies ICFRE FRI Jan 2016 Non Timber Forest Products Marketing - A Case Study in Aizawl Market, Mizoram, India June 2023	Dr. Ashok Pandey and Dr, Yogesh Chandra Tripathi Mail- ashokpandeyicfre@gmail.com Dr. Michelle C Lallawmkimi Sr. Scientist & Head <u>Mail-</u> <u>michellelawmkimi@gmail.com</u> Mo-9436146318	Research has suggested strategies for sustainable management and development of NTFPs, including diversifying income sources, providing alternative fuelwood, and involving local groups in planning and implementation.
9)	Buchanania lanzan (chironji) seeds from 13 CPTs were evaluated for their nutritional contents. MPC-8 was found to be the best source in respect of oil, carbohydrates and tannin content followed by MPC-10 and MPC-2 for ascorbic acid and trace minerals. Seeds of B. lanzan provide good opportunities to develop value added products, dietary supplements and phytotherapeutic compounds	Dr. Vishakha Kumbhare Sc.E icfre chhindwara (M) 09826884168	Sustainable harvesting for chironji with respect to market strategy and livelihood enhancement

S.No.	Work	Prominent Scientist	SFRTI
10) 11)	The protocol for processing of fruits and preservation of fruit pulp of <i>Schleichera oleosa</i> (Kusum) was standardized. Value added products of kusum were also prepared. The elite germplasm of three dashmool species (<i>Solanum indicum, Solanum xanthocarpum and Uraria</i> <i>picta</i>) were screened out in Madhya Pradesh. Chromatographic chemical fingerprint profiles of different parts developed.	Dr. Hariom Saxena Sc. D SFM DIVISION 0761-2744118	Wild fruit processing and value addition of lesser known and under utilized as well as protection of the endangerd tree species by generating their value added products for livelihood enhancement.
12)	An innovative approach for isolation of essential oil from aromatic plants by using enzymes that enhanced yield and quality and reduced the artefacts formation.	Dr. Rashmi Sc-E (O) 0135-2224211 (M) 941231883	develop techniques for essential oil yielding species like citronella ,lemon grass etc.
13)	Non destructive harvesting technology for <i>Cyperus scariosus</i> (Nagarmotha) was developed which is pivotal in harvesting this important NWFP sustainably to ensure adequate regeneration and arrest its depletion in wild.	Dr. Abha Rani Sc-E (O) 040-66309520 (M) 9414071269	Develop least destructive and minimum loss harvesting and processing techniques of various medicinal plants.

THANK YOU