



# INSTITUTE OF FOREST PRODUCTIVITY

(INDIAN COUNCIL OF FORESTRY RESEARCH & EDUCATION)  
RANCHI



## Monthly Research Seminar Report

As part of monthly seminar series, a research seminar on the theme, “Wild Edible Fruiting Species” was organized on 14<sup>th</sup> January, 2021 at the Institute of Forest Productivity, Ranchi through virtual platform. Dr. Nitin Kulkarni, Director, IFP, Ranchi presided over the seminar. There were two speakers; Ms. Ruby S. Kujur, Scientist-C who spoke on “*Wild Edible Fruiting Species*” and Dr. Jyotish Kumar Kerketta, Associate Professor, Birsa Agricultural University, Ranchi who spoke on the topic - “*Wild edible fruits and their role in sustaining livelihood opportunities*”. The webinar was attended by scientists/ officers/ research staff of IFP and all its centres. The presentations were followed by discussions on the theme with prospects of future inter-institutional collaborations.

**THEME** : Wild Edible Fruiting Species of Jharkhand  
**TOPIC** : Wild Edible Fruiting Species  
**Speaker** : Ms. Ruby S. Kujur, Scientist-C, IFP, Ranchi, Jharkhand

Ms. Ruby S. Kujur spoke on the importance of Wild Edible Fruits (WEFs). WEFs are among the most commonly used NTFPs and are mostly categorized as underutilized or neglected species. They are consumed by a large section of the global (mostly rural) population and ensure both affordable food and nutritional security. They are considered to be important sources of nutrition, medicine, diet supplement, subsistence needs, improving rural livelihoods and income for their users. WEFs have been studied, analyzed and recommended as rich sources of antioxidants, minerals, and vitamins. They hold great cultural significance to dependent communities and are often used in different formulations of Ayurveda in Indian medicine. Their rich diversity is associated with indigenous and traditional knowledge systems. Nutritional superiority of some of the wild edible fruits has also been reported over the cultivated ones.

### Identification of research needs.

- Considering the important usages and medicinal properties wild edible fruits have been recommended for in-situ as well as ex-situ conservation.
- Important to propagate, cultivate, domesticate and conserve the wild fruit species.
- More than half the harvest of WEFs collected is traded for cash. Production, trade and monetary gain from wild edible fruits need to be highlighted.
- Gaps in information on demand and supply of wild edible fruits exist, so their market value and market chain needs to be assessed.

- With respect to harvest and processing of wild edible fruits, the traditional knowledge systems should be documented.
- Value addition and niche market creation are crucial step for success in commercialisation of wild edible fruits and may be effective in securing livelihood.
- Strategies are needed for multiplication, conservation and adoption into the agroforestry systems.

### **Formulation of future strategies**

- Value addition and niche market creation - economic incentives, regulated market systems and stakeholder synergies should be incorporated into WEFs conservation strategies.
- Recognition and popularization of WEFs and their value added products in the local, national and international market by involving local indigenous communities.
- Adoption of wild fruit tree farming which could enhance nutrition and income of tribal populations.
- Adopted of WEFs in traditional agroforestry systems, to increase income for farmers.
- Conservation of WEF species in their wild habitats.

Finally Ms. Ruby S. Kujur concluded the presentation with the following points.

- Comprehensive studies needed to be taken up describing the extent of the diversity, frequently used taxa, changes in pattern of consumption with geography.
- Assessment of extent and magnitude of dependence on wild fruit resources to be incorporated into policy decisions in order to promote utilization, value addition and conservation of WEFs.
- Assessment of economic potential and market for WEFs towards formulating socio economic policies.
- The wild edible fruits need to be popularized as part of special supplemental diets with specific nutritional significance.
- Value addition of the raw and ripe fruits may overcome the acceptability barrier and may help in creating a niche market.
- Inclusion in agroforestry systems and urban forestry programmes can prove to be helpful in income generation and afforestation activities.

After presentation, the discussion involved Dr. Y. Mishra, GCR suggesting genetic conservation studies and development of nursery techniques for some important wild edible fruits. Sh. Sanjeev Kumar, Scientist-E suggested grafting nursery technique to maximize production and make them economically commercial. Dr. B.R.Suchiang, Scientist-B suggested that wild edible fruits be incorporated in roadside plantations to also generate awareness for its use and conservation. Sh. R.S.Prasad, CTO informed that some of the wild edible fruits like, churchu mango with

medicinal properties of its timber also, were no more found in the wild due to over exploitation and deforestation.

**THEME -** Wild Edible Fruiting Species of Jharkhand  
**TOPIC -** Wild edible fruits and their role in sustaining livelihood opportunities  
**Speaker :** Dr. Jyotish Kumar Kerketta, Associate Professor, Birsa Agricultural University, Ranchi

The second presentation was made by Dr. Jyotish Kumar Kerketta, Associate Professor, Birsa Agricultural University, Ranchi. He made a detailed presentation on the topic whose outline is as given below:

- Classification of wild supplementary foods/ fruits
- Loss of wild edible plant biodiversity
- Potentiality of underutilized wild fruits
- Range of nutrients of wild fruits
- Comparison of nutrient values of conventional and non conventional fruits
- Discussion on some important wild fruits of Jharkhand
- Wild fruit species found in markets of Jharkhand and the market rates
- Reasons for non promotion of wild edible fruits
- Value added products of wild edible fruits and sale profit margins
- Potential of wild edible fruits to enhance tribal economy
- Strategies and suggestions involving rural people, SHGs, GHGs and the government
- Constraints involving collection, storage, value addition, market awareness generation etc
- Conclusion

Dr. Kerketta discussed on various aspects of wild edible fruits. He talked about urbanization, rising population, shift in land use pattern, changes in cropping pattern, deforestation etc as some of the major factors that are leading to loss of wild plant biodiversity. He discussed in detail on the potentiality of underutilized wild fruits. He talked on the comparison between nutrient values of conventional and non conventional fruits. He highlighted some wild edible fruits that were sold in the market alongwith their market rates and compared their rates with the conventional fruits sold in the market. He talked about the value added products made from some wild edible fruits that were sold and compared their sale profit margins. Citing reasons for constraints and non promotion of wild edible fruits he said that the perishable nature of wild edible fruits makes it impossible for it to be collected in huge quantities, with no or poor storage facilities. He added that the value added products are also not commonly made, used and sold, except a few like mahua (*Madhuca indica*), imli (*Tamarindus indica*), chironji (*Buchnanian lanzan*) etc. He highlighted that wild edible fruits had the potential to enhance tribal economy with support from the government, SHGs and GHGs and that there was a need for organized collection, provision

of storage facilities at cluster level, value addition and market support, alongwith technical capacity building, in situ and ex situ conservation and regeneration options. He finally concluded that priority should be given towards creation of a value chain and niche market creation for success in commercialisation of wild edible fruits.

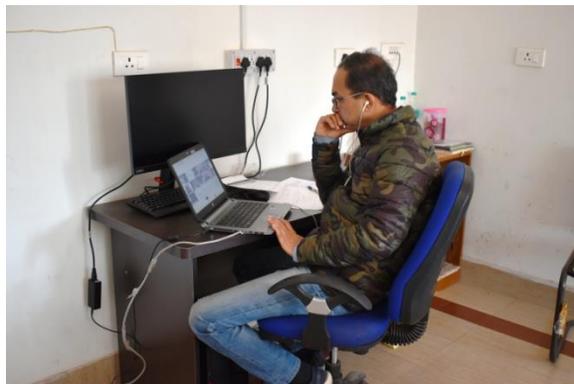
Summarising the seminar, Dr. Nitin Kulkarni, Director, Institute of Forest Productivity, Ranchi highlighted the following:

- Wild edible fruits are important for rural population and efforts are to be made to generate livelihood opportunities.
- Identification and multiplication of propagation methods to be studied.
- Physico chemical analysis of wild edible fruits is essential for determining the active compounds for efficacy and economical gains.
- Emphasis to document and analyse the lesser known species especially the RET species must be emphasized upon.
- Phenological studies to be taken up in future.
- Development of value added products alongwith market linkages to be studied.

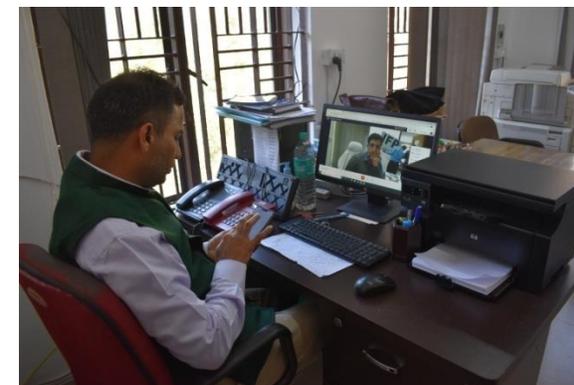
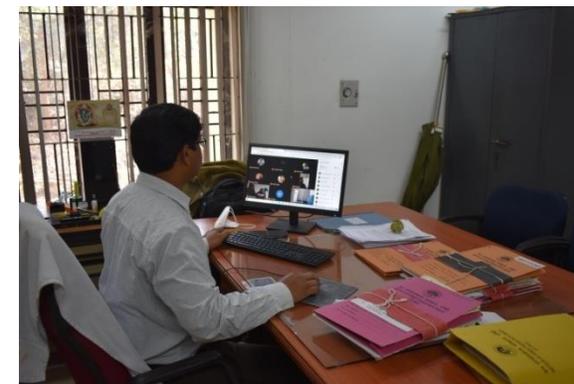
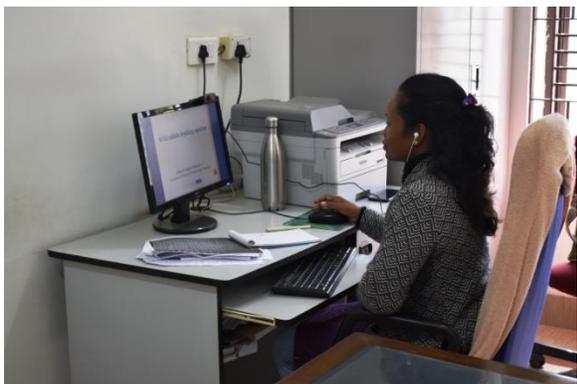
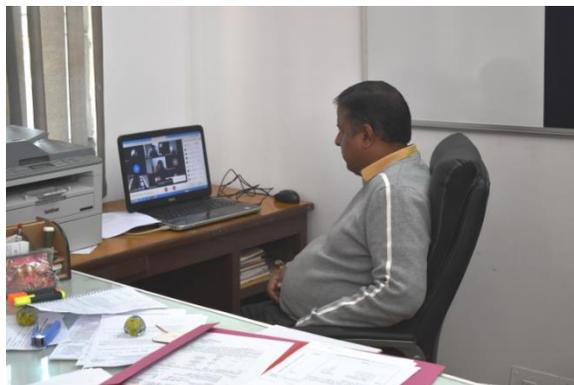
The seminar ended with critical discussion on the presentation and formulation of future collaborative strategies and inter-institutional networking under the chairmanship of Dr. Nitin Kulkarni, Director, Institute of Forest Productivity, Ranchi.

#### **Networking research options & opportunities**

- Efforts for formulating networking research projects with NBPGR, Ranchi, Birsa Agricultural University (BAU), Ranchi, and ICAR research complex for eastern region, Ranchi to be initiated.
- There is a need to start collaborative research projects on similar lines with in collaboration with State Forest Departments.



Glimpses of the Seminar



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