

INSTITUTE OF WOOD SCIENCE AND TECHNOLOGY, BANGALORE

BHARAT KA AMRUT MAHOTSAV – 75th YEARS OF INDEPENDENCE CELEBRATION

Report on - Fodder species for different agro-climatic zones of Karnataka (29th June 2022)

Azadi Ka Amrit Mahotsav is an initiative of the Government of India to celebrate and commemorate 75 years of Independence of progressive India and the glorious history of its people, culture and achievements. Hon'ble Prime Minister of India, Sri.Narendra Modi inaugurated 'Azadi Ka Amrit Mahotsav' celebration by flagging off 'Dandi March' from Sabarmati Ashram, Ahmedabad on 12th March 2021, 75 weeks before our 75th anniversary of Independence and will end past a year on 15th August 2023.

As part of this celebration, ICFRE is conducting various programs like technical series, workshops, exhibitions, documentary shows, poster and essay competitions, cycle rallies etc. As part of 69th week celebration of Bharat Ka Amrut Mahotsav, the Institute conducted a webinar on **“Fodder species for different agro-climatic zones of Karnataka”** on **29th June 2022**. The programme was attended by IWST employees and research staff.

India faces a critical imbalance in its natural resource base with about 18% human and 15% livestock population of the world being supported only on 2.4% geographical area, 1.5% forest and pasture lands and 4.2% water resources (Ministry of Rural Development, 2015). The supply of green and dry fodder in India during 2015 have been estimated at 400.60 million metric tonne and 466 million metric tonne respectively against the demand of 1097 million metric tonne and 609 million metric tonne, respectively (Planning Commission, 2007). Feed and fodder availability estimates (2003-2004) from forests were 89.37 million metric tonne out of total 462.05 million metric tonne green fodder (Planning Commission, 2007). The major focus of the departments of animal husbandry and agriculture has been to promote stall feeding based mainly on cultivated fodder and feed meals viz. Accelerated Fodder Development Programme (AFDP) a part of the RashtriyaKrishiVikasYojana (RKVY) under which fodder resources in 25,000 villages were to be improved over the 11th Plan. However, there does not seem to be any programme by these departments to develop fodder resources on CPRs (Common Property Resources). The forest departments have been engaged in managing grazing lands that have been legally classified as forests. A centrally sponsored scheme titled “Area Oriented Fuel and Fodder

Project Scheme” under National Afforestation & Ecodevelopment Board (NAEB) has also been implemented over the 11th Plan period (Planning Commission, 2011). However, most of these efforts have been to close the areas and plant up these with trees, resulting in further depletion of areas for free grazing. These efforts have been too small and too widespread to show any significant results.

Usually multi-use trees are raised by SFDs inside forests and on forest fringes to meet diverse needs of the local people. Dependence on fire wood is declining due to various government schemes providing subsidized gas. However, shortage of fodder continues unabated. The project therefore envisages developing protocols for focused production of tree leaf fodder on common land or forest land. The findings available from researches in Indian Grassland and Fodder Research Institute (IGFRI), Jhansi which specializes in raising fodder trees and grasses in agricultural land, will be utilized to develop suitable model for non-agricultural community land, forest land or degraded land near the village. A new approach of high-density fodder tree plantation with coppicing has been conceived, which will be used under the project. This approach is expected to increase the production of tree fodder per unit area per unit time. Not much research has been carried out in India on protection measures against animals during establishment phase of plantations. In the absence of proper protection measures against domestic animals, fodder plantations in the degraded forest lands provide very low survival and yields. This project, therefore, also aims at developing measures, including chemical repellents, for protection of plantation from domestic animals and studying issues concerning establishment, intensive management of fodder plantation in degraded forest land on forest fringe as well as sharing of fodder among beneficiaries. Germplasm and techniques developed in various research institutions across the country will be utilized during implementation of the project and gaps in existing research base.

The Programme started with the welcome address by Mr. C.M. Shivakumar, IFS, Head, Extension Division. The opening remarks were delivered by Mr. V.S. Shettepanavar, IFS, Group Coordinator(R), IWST, Bengaluru and spoke about the current scenario of fodder availability in India and the need for package of practices region wise to mitigate the pressure of grazing the natural forests. He also highlighted that due to over grazing many of the the species have become vulnerable. The technical session was started with lecture by Sri. Chandrashekar B. S, Scientist, SFM Division on the topic **“Fodder species for different agro-climatic zones of Karnataka”** in which he elaborated about Fodder tree species and Grass species which are suited for different agro-climatic zones of Karnataka with reference to the experiments

conducted at three location in Karnataka viz. Regional Fodder Station, Hesaraghatta, Bengaluru , UA&HS, Shivamogga and IGFRRI regional station , Dharwad. The experiments will be conducted in these three locations and also will be retained as demonstration plots for future extension programmes of the Institute.

Ms. Atulya, Scientist - B, Forest protection Division, IWSTenquired about the toxic materials present in some leafy fodders species especially Tapioca which is widely used in Kerala for animal feed. The only way to remove the toxic material is to cook the tapioca leaves and remove the latex material and then feed the animals.

Shri. V S Shetteppanawar enquired about Gliricidia and Subabol, that why they are not preferred by farmers. The reason is that both the species contain few toxic chemicals which hamper the milk quality. Hence the leaves are soaked in water overnight to leach out the toxic chemicals and then used as fodder. This will reduce the chemical content in the leaves.

The programme was concluded by Sri. Chandrashekar B. S, Scientist and to summarize the deliberations-

1. Selection of Fodder species and their nutritive value plays an important role in livestock management.
2. Suitable species need to be recommended for planting in fringe area / under social forestry programme to mitigate the pressure on natural forest for grazing.
3. Establishment of demonstration plots will help to have a successful extension programme in future

The Programme end with a formal Vote of thanks by Sri. C M. Shivakumar, IFS, Head, Extension Division.

