

Green fodder based entrepreneurship for doubling farm income

A Success Story

Dr Palsaniya¹, R V Kumar², Akram Ahmed³, C K Gupta⁴ and Pushpendra Koli⁵

ICAR-IGFRI, Jhansi 284 003, UP, India

SHRI Nathu Ram Yadav, a marginal farmer from village Unnav-Balaji, District Datia (MP) owned two acres, irrigated land adjacent to his residence. He has two buffalo and mainly practicing subsistence agriculture which is the only source of livelihood. A team of scientists Drs R V Kumar, D R Palsaniya, C K Gupta and Akram Ahmed from Indian Grassland and Fodder Research Institute (IGFRI), Jhansi (UP) adopted his village under *Mera Gaon Mera Gaurav* programme in 2014-15. The low monetary return from his present farming compelled him to come in contact of ICAR-IGFRI team. He urged the team to suggest suitable options to enhance his livelihood and meeting out family expenses. During discussion, the team realized that he is already growing some fodder for his animals and there is some demand of fodder from land less livestock keepers and other resource poor farmers from village itself. Such livestock keepers purchase green fodder from other farmers having surplus fodder. Therefore, the team suggested him to grow fodder *sorghum-berseem* intensive cropping system on two acre land both to meet his household requirement and to sale the surplus fodder to village livestock



Berseem strips during Rabi



Bund plantation of BN hybrid

keepers. He was also suggested to plant *Bajra* Napier Hybrid on the field bund and Subabul on field boundary. Accordingly, high quality *berseem* (Wardan) and *sorghum* (MP Chari) seeds and BN hybrid (IGFRI 6) rooted slips were provided to him by the IGFRI team. An exposure visit to IGFRI farm was also arranged for him.

Fodder sorghum during summer and *berseem* during *rabi* were established under the guidance of IGFRI team in two acres area. BN hybrid was established on field bunds at 50 cm plant to plant spacing. The farmer made 80 small plots of 30 m × 3 m dimensions in his two acres field during both the seasons. He kept 20 fodder plots for his household requirement and remaining 60 plots were sold to village livestock keepers at ₹ 1,200 each in both the seasons. Thus he earned ₹ 1.44 lakh from both the crops in one year. The total cost of cultivation of both the crops including seed, field preparation, sowing, fertilizers, irrigation, labour, etc was estimated to be ₹ 0.4 lakh. Thus, he earned ₹ 1.04 lakh net profit per year from his two acres land besides meeting his own fodder requirement. Under usual condition,

he used to earn ₹ 40,000 to 50,000 by growing wheat based cropping systems on his two acres land. He also earned additional ₹ 20,000 from sale of milk and *ghee*. He took 7 cuts of fodder from BN hybrid planted on bunds as additional profit. BN hybrid is serving as a round the year source of green fodder for his animals. This forage on bund technology is capable of producing 700–1100 kg green fodder per 100 metre bund length per year. He reported that milk productivity of his animals also increased due to balance feeding comprising *sorghum*/BN hybrid and subabul leaves. Shri Nathu Ram Yadav is now a happy farmer and is a source of inspiration to other farmers in the locality. He is of the opinion that perennial BN hybrid should be promoted on larger scale on field bunds and unutilized land as an additional source of fodder. He is a role model of IGFRI for fodder on bund technology and his farm is a live spot for visitors for fodder based entrepreneurship.



Sorghum MP Chari during Kharif

¹Project Coordinator, ^{2,3,4}Scientists, ⁵Principal Scientist, IGFRI, Jhansi 284 003, Corresponding authors' e mail: drpalsaniya@gmail.com