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Productivity enhancement of livestock through promotion of fodder cultivation in Jehanabad district

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Introduction

Livestock production is the backbone of Indian agriculture and also plays a key role in providing employment especially in rural areas. In India, there is no practice of fodder production in rural areas and animals generally consume naturally grown grasses and shrubs which are of low quality in terms of protein and available energy, they are thus heavily dependent on seasonal variations and this results in fluctuation in fodder supply round the year affecting supply of milk round the year. For proper growth and development of the livestock, feed management is of great importance. In Jehanabad district, majority of the farm families are small and marginal having agriculture + livestock farming system. In spite of having large cattle population in the district, the area under fodder production is hardly 1-2 percent of the total cropped area. The continuous use of rice and wheat straw for feeding without use of green fodder is one of the reasons for low milk production and poor health of milch animals. There is acute shortage of fodder especially green nutritious fodder, which is major cause of low productivity of livestock, especially in hilly area (Deb Roy *et al*., 1989) The main 3 reasons for low productivity is insufficient and low quality fodder and feed including grazing facilities (Deb Roy, 1993). Presently research has been mainly conducted on cultivation of green fodder in irrigated areas but it is high time to emphasize to dry land fodder or partially irrigated fodder crops.

Materials and Methods

In Jehanabad district more than 50 percent of the land is in rainfed situation. Keeping the problem of poor health and low productivity in view and to meet the nutritional requirement of livestock, Krishi Vigyan Kendra, Jehanabad under the administrative control of Bihar Agricultural University, Sabour, Bhagalpur promoted the cultivation of green and palatable fodder including leguminous fodder as a part of demonstration programme. These fodder crops included Maize (J 1006), Cowpea (Bundel 2), Coix (KCA 3) and Rice bean (Bidhan 1) brought from Kalyani, West Bengal. The total number of demonstration was 21 and area of each demonstration ranged from 0.2 to 1.0 ha.

Further, seeds and planting materials also brought from IGFRI, Jhansi, M.P for demonstration which included Berseem(Wardan), Oat (kent), Bajra (AVKB-19), Cowpea (UPC-628), Sorghum (M.P.Chari), Dinanath grass (BD 2), Guniea grass (BG 2). Subabool (K636), Maize (African Tall), Stylo and Hybrid. Napier where the total numbet of demonstration was 31 and the area of each demonstration ranged from 0.05 to 0.25 ha. Under the demonstration programme, the livestock owning farmers were motivated to take up fodder cultivation round the year through using high yielding varieties with better management practices. They were also trained for the seed production of fodder crops. This necessitated within them the insight for the selection of suitable green fodder crops which will produce higher green forage yield per unit area and time.

Results and Discussion

The result of the demonstrations were quite encouraging in terms of increase in milk yield and increase in yield of demonstrated crops as compared to check. Besides, farmers were also able to store the seed for future in order to avoid the purchasing of seeds from outside source. Farmers of adjacent villages (non- demonstration area) are approaching the KVK for technical guidance for green fodder production to feed their animals.

Table 1 - Demonstration on fodder crops in Jehanabad district

S.No.	Crop	Variety	No. of demonstration	Area (ha)	Average yield of demonstration (Ton/ha)	Avergae yield of check (Ton/ha)	% increase in yield
1	Maize	J-1006	10	1.0	40.61	33.0	23.06
2	Cow Pea	Bundel-2	6	0.6	22.05	17.80	23.88
3	Coix	KCA-3	3	0.3	44.8	New Introduced	-
4	Rice Bean	Bidhan-1	2	0.2	24.9	New Introduced	-

Conclusion

The overall scene of forage production is very alarming and corrective measures have to be taken to improve this problem. The importance of forage production in maintaining food security as well as nutritional security has been felt since long. There is utmost need to organize method / result demonstrations and organizing field days showing the monetary gain and benefits of cultivation of high yielding varieties fodder crops. Farmers can be motivated through campaigning for growing perennial fodder crops. There is need to strengthen the manpower of animal husbandry departments across the country who should be trained in latest technologies to support the livestock owners both in terms of animal health as well as management aspects. There is need to promote scientific fodder crop production through improved agronomic practices and improved seed. Trainings must also be conducted to train the fodder growers to keep them abreast with latest technical know how.

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