

Monitoring Visit & Review of Farmer FIRST Project of ICAR-CSSRI, Karnal

Livestock Component

Dr. Ram Chand, Former ADG (AE), ICAR & Expert Member PMC, ICAR along with FFP team of ICAR-CSSRI on 27th August, 2024 visited beneficiary farmers who are involved in livestock rearing with the help of know-how and inputs extended by the project team. These farmers have Buffalo (Murrah), Cow (Sahiwal and HF). A discussion was held with these farmers covering various aspects of the interventions such as effect of nutrition supplements (e.g., anionic mixture, mineral mixture and bergaFat etc.) on the growth, productivity, and overall health of the livestock. I found that almost all the beneficiaries are following recommended practices for livestock management, including proper feed supplementation and balanced nutrition as suggested by FFP team. Rational behind providing these supplements was to improve the productivity, re-productivity and overall improvement in energy intake during summer when there is acute shortage of green fodder in the selected site. Sh. Rajesh narrated his success story as “By following the recommendations (house and feed management) of the FFP-team, he could sell a buffalo of Rs 2.32 lakh, and planning to add one more cattle soon”.



Figure 1: Glimpse of visit of beneficiaries at Kathura

Mineral Mixture Making Machine

Under the Farmer FIRST project, a mineral mixture making machine (taken over from ICAR-CIRB Hisar) was provided to a group of the farmers for making mineral-mixture from locally available low-cost raw material. For easy-use of the machine, the method and composition was depicted on the machine itself. Thus prepared feed is expected to not only save money but also improve the overall health of the livestock as the feed can be prepared as the requirement of them.



Figure 2: Demonstration of mineral mixture making machine from locally available grains

NRM Component

Around 529 ha area in Kathura village was severely affected by waterlogged-saline soils, and practically lands were barren, having adverse bearing on the livelihood security of resource-poor farmers of the areas. As a part of the NRM-based module implemented in the Farmer FIRST project led by the ICAR-CSSRI, Karnal, in collaboration with the HOPP scheme of Haryana State, around 289 ha, covering 7 blocks was reclaimed by installing subsurface drainage (SSD) technology. To increase the effectiveness and efficiency of the SSD, the system was operated by introducing an innovative “Trolley-Mounted sliding type solar pumping-sets”.



Figure 3: Glimpse of visit of SSD Sites

This helped avoid community-based management issues that resulted in the suboptimal use of the reclamation capacity of the SSD. Based on the data from the field experiments, a significant increase in the yield of wheat crop was recorded, which was around 1320 kg per ha (from 3535 kg per ha before SSD installation to 4855 kg per ha after SSD installation). This increased the net return to the tune of Rs. 26598 per ha. Extrapolation of these incremental changes in wheat yield to the treated area shows that production and farm income increased by 3815 q and Rs 76.87 Lakhs, respectively. This implies that the installation of SSD increased farm income to the tune of Rs 33,534 per family.

Horticulture Component

All the team members visited Guava cv. Hisar Safeda orchard (Sh. Ravi S/o Laxminarayan) established under FFP. Around 200 good quality plants were observed in the field. This orchard is under fruiting since last year and the farmer was benefitted with approximately Rs. 30000/- by selling the guava fruits in the local market. By seeing the demand of Hisar Safeda in market the farmer showed interest in increasing the area under guava plantation in the coming season. The farmer is not using any kind of insecticides and pesticides in his farm. Therefore, the fruits from his orchard are fetching more prices in the market as compared to the other growers.



Figure 4: Glimpse of visit of Guava Orchard

Crop Based Module

Rice Varietal Trail

Various high yielding varieties of rice (PB-1718, PB-1692, PB-1121, PB-1509); Salt tolerant varieties (CSR 56, CSR 60, CSR 76 and CSR 30) trials is under progress at Kathura, Dhanana, Chhiri, Banwasa and Khalpa village. Team visited the fields of progressive farmers who have been chosen for the purpose of conducting field trials under FFP. This year, it is observed that rice crops is very adversely affected due to late onset of monsoon season, thereby there was a delay in its transplanting delayed by one month as compared to the usual timings of transplanting in the project area. On the discussion with farmers, it came to know that the seed germination was very poor in the farm who used home-seeds from last season crop; whereas relatively better germination percentage was reported in the plots wherein seeds were provided under FFP. Keeping this in view, most of the farmers were of the opinion that they would adopt the seeds of improved and salt-tolerant crop varieties.



Figure 5: Glimpse of visit of Rice Varietal Trials at farmer's field

Farmers Scientist-Interaction meeting

FFP team was welcomed by the villagers during the farmer-scientist interaction programme at Narwal Bhawan in Kathura village. A brief introduction about the activities carried out during Phase-1 and Phase-2 of FFP was given by Dr. Rajkumar, PI-FFP. Besides, all the Co-PIs briefly explained the work done in the adopted villages in respective fields. The participation of local farmers was commendable, indicating a strong community liasoning-interface of the FFP team with the farmers of the adopted village. All the farmers enthusiastically participated, and took advantage of this interaction meeting by applauding the work done by the FFP in selected villages. They also mentioned how their unproductive land was brought under productive use by installation of SSD. The farmers urged to PMC member to extend the duration of the project in this area for another 5 years so as to complete the SSD installation in the remaining waterlogged-saline areas.



Figure 6: Glimpse of farmers-scientist interaction meeting

On 2nd Day (28th August, 2024) Dr S K Sanwal, Head, CID welcomed me and briefly explained about the research programmes and technologies developed by ICAR-CSSRI, Karnal. Presentation of Annual Progress Report (2023-24) was made by Dr Rajkumar, PI, FFP in the conference room of ICAR-CSSRI, Karnal. All the team members were also present during this programme.



Figure 7: Glimpse of scientist interaction meeting

During the discussion session the following points were suggested to the FFP team at CSSRI:

1. Efforts should be made for installing sense of agripreneurship among the interested farmers.
2. Assess the effect of the FFP on KASA (Knowledge, Attitudes, Skills, and Aspirations).
3. Ecological sustainability component should be incorporated
4. Technologies should be farmers friendly
5. Impact analysis is essential to find out the suitability of technologies