Strengthening Farmers' Livelihood Security through Farmer FIRST Programme: Experiences and Impact of CRRI-led Modular Interventions

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Preface

Indian agriculture is experiencing major structural, technological, and institutional changes to improve productivity, efficiency, sustainability, climate resilience, and farmer livelihoods amid growing constraints. In this evolving context, integrating advanced research with participatory, farmer-focused extension systems is vital to scale innovations and strengthen the research–extension–farmer linkage for relevant, viable, and sustainable outcomes.

Within this framework, the Farmer FIRST Programme (FFP) of the Indian Council of Agricultural Research (ICAR) marks a paradigm shift in extension research by positioning farmers as co-researchers and principal stakeholders in technology generation, refinement, validation, and dissemination. This bulletin systematically presents the technological interventions, scientific approaches, and measurable outcomes of the FFP implemented by ICAR–Central Rice Research Institute (CRRI), Cuttack, across selected village clusters in Cuttack district, Odisha. By institutionalizing a strong farmer–scientist–extension interface, the programme operationalized a demand-driven, location-specific, and participatory research model, facilitating co-generation, on-farm testing, and iterative improvement of technologies under prevailing agro-ecological, climatic, and socio-economic conditions. This approach enhanced technological relevance, farmer acceptance, scalability, and sustainability, while effectively bridging gaps between station-based research and field-level production realities.

Rice remains the cornerstone of India's food grain system, with production reaching a historic 150 million tonnes in 2024–25 and accounting for nearly 28% of global output. This growth reflects widespread adoption of high-yielding, stress-tolerant varieties alongside precision management and improved input-use efficiency promoted through ICAR research and extension. Aligning with these national gains, ICAR–CRRI interventions under the Farmer FIRST Programme achieved 10–20% yield enhancement, improved economic indicators, and higher productivity per unit of input through integrated use of HYVs, bio-fertilizer-based seed treatments, line transplanting, site-specific nutrient management, and water-efficient practices. Together, these interventions strengthen the sustainability, profitability, and climate resilience of rice-based systems, offering scalable pathways to enhance national food and livelihood security.

Authors

CONTENTS

Introduction:

Agriculture is rapidly evolving worldwide as emerging technologies transform the way crops are cultivated, monitored, and managed to enhance productivity, sustainability, and farmer livelihoods. Precision agriculture, digital tools, remote sensing, and automation are increasingly adopted across farm systems to optimize inputs, reduce environmental impact, and increase profitability. Studies estimate that precision technologies can enhance crop yields by 15–30% while improving resource efficiency through targeted application of water, nutrients, and crop protection measures. These technologies are basically addressed variability within agricultural fields and support climate-resilient farming practices.

In India, a pivotal component of agricultural technology intervention at the grassroots level is the Farmer FIRST Programme (FFP), a research to farm initiative of the Indian Council of Agricultural Research (ICAR) designed to strengthen the farmer–scientist interface and accelerate technology adoption through participatory, context specific solutions. FFP places farmers at the center of technology development, focusing on technology assemblage, application, feedback, and partnership building to enhance productivity, livelihood security, and resource use efficiency. Operating across multiple agro-ecological zones in India, the programme involves 52 FFP centers under ICAR and State Agricultural Universities in over 23 states, implementing tailored agricultural and allied technologies with strong farmer participation.

Field experiences from FFP interventions further illustrate the programme's value in real-world agricultural systems. In FFP clusters of Odisha's different districts, location-specific production technologies and resource-efficient practices introduced under FFP transformed rainfed rice farming into a more profitable and resilient model, improving water productivity, crop yields, household nutrition, and rural incomes. At the operational level, FFP centers enable collaborative demonstrations, training, and capacity building, that showcased natural resource management and livelihood enhancement technologies across hundreds of hectares of farmland.

The integration of cutting-edge agricultural technologies with participatory extension frameworks like FFP exemplifies how research-led innovation can be localized to address diverse farmer needs, environmental considerations, and socio-economic contexts. By fostering strong linkages among farmers, scientists, and extension systems, FFP contributes to India's broader goals of doubling farmers' incomes, enhancing nutritional security, and promoting sustainable agricultural development in line with national strategic priorities. Continued scaling and institutionalization of such technology interventions will be critical to ensure equitable access to innovation and achieving resilient agricultural growth in the face of climate variability and demographic pressures.

Farmer FIRST Programme: Conceptual Framework

The Farmer FIRST Programme (Farm, Innovation, Resources, Science and Technology), initiated by the Indian Council of Agricultural Research (ICAR) in 2016, was developed to tackle

the challenges farmers face in adopting new agricultural technologies and improving their livelihoods. The program marks a strategic shift in the country's agricultural extension paradigm. Before this initiative, many research institutions created agricultural technologies, yet their adoption at the farm level remained limited due to weak linkages between research, extension, and end-users. To address this issue, the Farmer FIRST Programme was designed with a comprehensive approach, integrating research, extension services, technology, and the knowledge of farmers. It promotes participatory research, allowing farmers to collaborate with scientists and offer valuable local insights. The programme ensures that the introduced technologies are relevant to the local context and that farmers play an active role in the process. While initially focusing on rice-based farming systems, the programme later expanded to include other crops and regions. It promotes the adoption of sustainable practices such as integrated farming systems (IFS), water management, soil health, and agroforestry, aiming to enhance productivity and sustainability. Through providing farmers with the right knowledge and resources, the programme seeks to increase productivity, boost income, promote sustainability, and improve the welfare of rural communities. The initiative underscores the importance of local innovations, where farmers' needs and feedback guide the implementation of agricultural technologies. Over time, the programme has evolved into a model that not only supports agricultural growth but also promotes farmer self-reliance and resilience.

The Farmer FIRST Programme, implemented by the ICAR–Central Rice Research Institute (CRRI), Odisha, is structured to empower farming communities through the strategic convergence of scientific advancements and indigenous technical knowledge. The programme follows a farmer-led and demand-driven extension paradigm, focusing on the effective conversion of research outputs into practical, field-level adoption. This approach aims to enhance crop productivity, resource-use efficiency, environmental sustainability, and overall farm profitability.

The programme operates through a farmer-centric and participatory research framework that reinforces the farmer–scientist interface via continuous and structured interaction. Farmers play an active role in identifying production constraints, prioritizing researchable issues, and providing iterative feedback on technological interventions, thereby improving the relevance, adaptability, and acceptance of innovations. Emphasis is placed on participatory technology generation, refinement, and validation through on-farm trials and demonstrations conducted under actual agro-ecological and socio-economic conditions, resulting in location-specific, cost-effective, and scalable solutions.

A defining feature of the Farmer FIRST Programme is its focus on strengthening convergence between scientific research and farmers through technology-enabled, participatory agricultural innovation. The programme is grounded in the principle that agricultural technologies must be scientifically sound, operationally feasible, and context-responsive, aligned with the local production systems and socio-economic realities of farming

households. Through sustained scientist–farmer collaboration, technologies are tested, fine-tuned, and optimized under real production environments using a feedback-driven and adaptive research cycle, ensuring technical robustness, economic viability, and farmer acceptability.

Special emphasis is given to small and marginal farmers, landless households, and farm women, who often face constraints in accessing modern inputs, institutional services, and advanced technologies. By prioritizing these stakeholder groups, the programme promotes inclusive and equitable access to scientific resources, enhances farmers' adaptive capacity to production and climate risks, and supports sustainable livelihood improvement through increased productivity, income generation, and reduced drudgery. Additionally, the programme facilitates institutional convergence and market linkages by connecting farmers with extension agencies, research institutions, input suppliers, and output markets, thereby strengthening the agricultural innovation system and enabling long-term impact.

Locale of the project

The project was successfully carried out in a cluster consisting of four villages of Cuttack district—Satyabhamapur, Biswanathpur, Ganeswarapur, and Laxminarayanpur—engaging over 800 small and marginal farmers, including women. Currently, the project is also active in four more villages in the same cluster of Salepur block of Cuttack district, Odisha, including Ganapur, Gopinathpur, Purushottampur, and Malihata engaging over 500 small and marginal farmers, including women. The areas are characterizing by hot, dry, sub humid ecosystem with hot summer and mild winter. The mean annual rainfall is 1434 mm with majority of total annual rainfall is received during July to October. Soil type prevailing in the village include of sandy loam and loam.

Fig 1: Cluster of Farmer FIRST Programme

Approach of the project

The overall demonstration is divided into five segments or modules: crop-based, horticulture-based, animal husbandry based, enterprise-based, and IFS (Integrated Farming System) modules for optimal resource use, along with providing quality training to the participating farmers for gaining better output.

In the crop-based module, the project introduced improved paddy varieties such as CR Dhan 312, Swarna *Sub1*, Sarla, and CR Dhan 911 (Basudev). The horticulture module focused on introducing superior varieties of crops like Okra (Shivansh), Ridge Gourd (Akshaya), Cucumber

(Rainy Special), Pumpkin (Paradise), and Watermelon (Vaishnabi). Within the animal husbandry module, the project promoted the rearing of dual-purpose backyard poultry, particularly the Vanaraja breed, and showcased composite carp culture technology in the four adopted villages. Additionally, a poultry-fish-horticulture-based integrated farming system (IFS) model was developed in one village, aiming to enhance household income through the integration of diverse agricultural enterprises. This project also focused on the enterprise module, which is primarily aimed at adding value to agricultural crops by transforming them into value-added products such as *badi*, spice masalas, and more. This initiative was designed to provide additional income for farming households, with a particular emphasis on empowering women farmers.

Objectives:

- ✓ To assess the problems, needs and opportunities of the farmers in rice-based production system through farmers-scientists interface.
- ✓ To identify the technologies/ solutions available in the institute and outside aiming at doubling farmers' income, conduct participatory trials and transfer the refined technologies and approaches to similar agro-ecosystems through e-enabled knowledge sharing.
- ✓ To enhance technological and economic empowerment of farm women and strengthen gender relations in the production systems for sustainable agriculture.
- ✓ To ascertain the operational constraints as perceived by the farmers and farmwomen in adoption of technologies during experimentation as feedback for refinement.
- ✓ To study the impact of these technologies on changes in knowledge, skill and adoption level of farmers and overall productivity gains.

Methodologies

- ***Agro-eco system analysis:***

It was observed that growing of rice, pulses, vegetable and rearing of livestock were the major agricultural activities of the people in the cluster. The major rice varieties grown are CR Dhan 1018, Pooja, Pradhan Dhan etc. Similarly, the major vegetables are okra, ridge gourd, pumpkin, cucumber etc. Among the livestock, cattle and poultry are being regarded as the sustaining line of the livelihood in the village.

There are many problems encountered in water sector like unavailability of water at the time of requirement due to delaying in canal and sub-canal supply, high infestation of weeds in the canal decreased its capacity and unlined canal enhances the seepage loss. Apart from these, peoples adopt traditional methods of irrigation like flooding, check basin irrigation whose irrigation efficiency is low. Non availability of cold storage in the village leads to post-harvest loss of vegetable. The problems related to animals are parasitic disease and reproductive problem.

Stress tolerant rice varieties are not found in the production system. The old varieties are found to susceptible to pest and disease. Imbalance fertilizer application to rice crop has raised serious doubts among vast section of the farmers on the productivity of the soil. Weed infestations particularly in low land ecologies is a major threat so far as profitability of the rice is concern. The major weeds seen were Cyprus rotundus, Cynodon dactylon, Lantana camera, Parthenium hysterophorus, and Datura spp. etc. Assured source of small machines and tools for rice farming is almost absent for which the cost of production and loss of crops are found very common. The sowing of rice is started from first week of July and transplanting takes place in August.

The areas surrounding the human habitations are mainly the agricultural fields. One peculiarity with the village agro-ecology is that lands immediately adjoining the majority of the agricultural families' living houses and well within the human habitations are devoted to vegetable crop cultivation which includes brinjal, cauliflower, cabbage, cucumber and others. Besides, the lands immediately surrounding the human habitations are occupied by vegetable fields, which produce mainly bitter gourd, cucumber, cow pea, and country-bean though a traditional method that uses the single bamboo branch to support the cultivation of bitter gourd, cucumber, cow-pea and country-bean one after another in a cyclical manner spanning throughout the year. Sometimes, the old okra plants after harvesting are used as support material. The supports for the twining vegetable plants are made by binding two okra plants from adjacent lines. Major part of the agricultural lands is having low elevation (not more than 20 meter) and are used for paddy cultivation in the *kharif* season and thereafter for cultivation of black gram and green gram utilizing the residual moisture and sometimes using the water from the canal present in the village.

Though, the village is having the canal, yet failed to supply water to the agricultural fields in most part of the year. The canal is infested with various weeds and the water flow ability of the canal is largely compromised. One large pond is present over the northern part of Bada Sahi and is used for irrigating the vegetables as well as used for traditional method of fishery.

Besides, the village is also bestowed with a pond excavated under Mahatma Gandhi National Rural Employment Guaranty Act (MGNREGA) programme. Apart from canal, there are more than twenty odd small to medium size ponds scattered mainly in the human habitation areas in different sahis. Majority of these ponds are used only for irrigation. However, the quality of water in most of these ponds is not good and is not suitable for human use. The discussion with the villagers also revealed that previously, i.e. before the extensive application of chemical pesticides in paddy field, small indigenous fishes were abundantly found in the water of paddy fields during the rainy season and as the water from the ponds could flow on to the paddy field, the small fishes swimming *en*-mass in the opposite direction of water-flow could have the access to the pond to enrich it. As the use of chemical pesticide in the paddy field is rampant in recent days, small indigenous fish population in the paddy field are quite

rare now and as a consequence the biomass of the fishes in the village ponds are presently quite low which is forcing the villagers to be apathetic for maintaining the ponds in good health.

It has come to our notice that the villages are bestowed with a good number of bound as well as un-bound open wells as a source of irrigation for their vegetable crops. The groundwater level fluctuates between 3–6 m during post monsoon and 5–8 m during pre-monsoon. Constrained by insufficient financial resource to install electric pumps, the villagers are forced to continue with the drudgery in the traditional ways to irrigate their crops. Many households utilize the water from hand operated tube wells for drinking and animal husbandry purpose.

Though there are more than 3000 animal population, the villages have no apparent grazing land and fodder field for the animals. This forces the animal owners to keep their animals entirely on stall feeding, or limited their feeding on the *bunds* of agricultural fields. In the water abundant period of the year the farmers cut the lush grasses from the agricultural field *bunds* and stall feed it to their animals. However, we have observed that the goats are allowed to browse on the scanty grass and wild vegetation on the embankments of the canal that are also contaminated with human faces. Similarly, certain animal owners allow their cattle, sheep and goats to feed on the grasses of the swampy land. It is interesting to note that the swampy land is studded with the population of the Lymnea species of snail (Fig. 5 d, e) that is the intermediate host for the zoonotic parasite Fasciola hepatica infects cattle, sheep and human as its definitive host. Therefore, it is not impertinent to assume that the livestock populations that graze in the snail studded land are constantly exposed to this parasitic infection causing loss of farmers' economy and animal welfare.

The cattle population of the village is approximately 2175 and includes both the local breeds and the cross bred Jersey populations which are almost evenly distributed throughout most of the agricultural households of the village. On an average each farm household have nearly four cattle. The village crossbred cow population is over 500 and on an average each cow produces only four litters of milk per day for 250 days a year. The low production of milk by the crossbred cows is attributed to the lack of grazing fields as well as fodder cultivation.

One of the most important observations of agro-ecological significance is the presence of large number of monkeys in the village. Though presence of monkeys is satisfying purely from an ecologist's angle, it is the destruction of vegetables and other crops by them that concerns the villagers the most. Similarly, presence of many cross bred Jersey stay bulls as well as few desi bulls in the village are of great concern to the villagers, as far as the crop destruction, venereal disease transmission among dairy cows and undesired breeding of the cattle are concerned. Thus, for sustainability of the ecology and the agriculture of the village, the villagers need the human-animal conflict as well as the stray bull menace to be resolved.

Although the farmers of the village keep dairy cows for milk production, most of them don't house the animals properly. They keep the animals usually under low height thatched roof with the floor being *katcha*. Further, the walls of the cattle shed are made of mud thus providing a suitable place for the breeding of ticks that infest the animals. The excreta of the animals are also not disposed properly. Usually those are kept in open pits near the streets making the environment of the village unhygienic. In addition, the carcasses of the dead animals are also not disposed properly. The key informants told that they usually throw the dead animals open away from the residential area; usually near the grave yard. We of course spotted the skeleton of a cattle lying on the swampy land. As the swampy land connects to a narrow canal on the southern border of the village, the practices of throwing carcasses open on the swampy land and the nearby grave yard lead to the dissemination of pathogens from the carcasses through water. The villagers stressed that they have not seen the presence of vultures in their village since the super cyclone affected their village in 1999 before which they were usually seen scavenging the animal carcasses thrown open on the grave yard near the swampy land.

The other major agricultural crops grown in the village are black gram, green gram, bitter gourd, snake gourd, ridge gourd, country bean, tomato, chillies, brinjal, okra, cauliflower, and cabbage. Major trees found in the village are neem, palm, date palm, teak, tamarind, subabul, mango, and bamboo among others. Besides providing fuel woods for cooking, the wood of the trees is also used for making agricultural implements such as the country plough and land leveller etc. In addition, bamboo branches are also used by the villagers for making fences of the vegetable garden. Many plants such the Lantana camara and Duranta among others are used by the villagers for green fencing.

- ***Technological gaps, Research problem identification and prioritization:***

One of the major factors limiting the productivity of rice-based production system in the cluster is the inadequacy of knowledge among the farming community on integrated technology. The yield gap between the on-station and farmers' field for most of the enterprises could be attributed to lack of system approach. Given below in the tabular form the technological gaps, research problems and their prioritizations with respect to the selected agro-ecology.

Sl. No.	Technological Gaps	Problems	Priority Areas
1.	Rice varieties for biotic and abiotic stress suitable to different ecology	Severe pest and disease problem, weed infestation specially in low land	Selection of rice varieties to meet the stress and other purposes
2.	Rice varieties suitable for value addition and commercial importance	Poor market demand and low return from rice	Selection of rice varieties to meet the stress and other purposes

3.	Integrated nutrient management of rice fields	Imbalance fertilizer application over decades	Appropriate low cost integrated nutrient management in rice/soil health card based recommendations
4.	Mechanization in rice by small and marginal farmers	Low productivity and loss of crop due to high labour cost	Testing small machines and tools to reduce cost of cultivation and drudgery of women farmers
5.	Integrated weed management in rice	Loss of crop, poor yield and grain quality due to weed infestations	Location specific weed management methods
6.	Suitable black gram and green gram variety for rice fallow and cold temperature	Poor productivity of local pulse varieties	Collection of suitable cultivar of pulses and develop package of practices
7.	Appropriate vegetable and fruit varieties for the locality	Spurious vegetable seeds and poor quality vegetable seedlings	Vegetable nursery growing by women groups and selection of suitable varieties and provision of appropriate fruit varieties for homestead
8.	Disease and pest management of vegetable crop	Poor yield from vegetable crops, excess applications of plant protection chemicals, health hazards of consumers	Safe and appropriate chemicals for control of pest and diseases of vegetables
9.	Nutrition and health measures for cows, small ruminants and poultry, lack of improved fish breed	Poor milk yield of cows, low weight and poor meat quality of small ruminants and poultry, low return, poor income from fish ponds	Identification of problems of livestock through health camps, fodder cultivation for the livestock; approaches and mechanism for technological and economic empowerment of women in livestock and supply of improved spawn/fingerlings
10.	Efficient water management practices in *kharif* and *rabi*	Wastage of irrigation and rain water leading to scarcity at peak period of crop growth	Appropriate location specific water management methods
11.	Improper integration of other enterprises with rice	Poor income and sustainability of the rice production system	Demonstration of rice-based IFS model

Farmer-scientist collaboration through capacity building

At the heart of this program lies a deep commitment to capacity building and promoting meaningful interactions between farmers and scientists. Throughout its duration, the program has organized a variety of activities, including field visits, field days, and workshops. These engagements provide invaluable learning opportunities and are essential in refining technologies through insights gained from real-world feedback.

Technology development, implementation, and feedback

Recommended technologies from esteemed organizations such as Central Institute of Freshwater Aquaculture (CIFA), Bhubaneswar; Central Horticultural Experimental Station (CHES), Bhubaneswar; Odisha University of Agriculture & Technology (OUAT), Bhubaneswar and others were thoughtfully showcased in the adopted villages, tailored to their specific needs and suitability. A wide range of interventions have been implemented across the cluster villages of the FFP, encompassing various modules as outlined previously, each aimed at fostering growth and development in the community.

Modular Interventions & Perceptible Impact

Crop based module:

With the objective of transforming rice farming into a more profitable enterprise, a set of high yield, and stress tolerance rice varieties namely CR Dhan 312, CR Dhan 911, Swarna *Sub-1*, and Sarala were disseminated among farmers during the *kharif* season of 2024-25. Prior to the onset of the cropping season, a comprehensive crop planning and varietal selection meeting was convened through pre-*kharif* rice workshop by involving progressive and key stakeholder farmers from the adopted villages. This participatory approach facilitated need based varietal allocation in accordance with agro-ecological conditions for ensuring greater ownership and adoption.

Fig. 2: Training programme on use of Trichoderma viride

The intervention emphasized on farm adaptive research through the conduct of field demonstration by integrating the complete scientific package of practices for low and medium low land paddy cultivation. These demonstrations were implemented over an area of 65 acres, with the active participation of 102 selected small and marginal farmers, aiming to validate the yield potential and economic viability of improved rice varieties under real farm conditions.

Improved package of practices of rice farming: As part of the essential input support system, each beneficiary farmer received a seed mini kit consisting of 10kg of certified high quality seed from CRRI. In addition to input distribution, farmers were sensitized and trained on pre-sowing seed treatment protocols using bio-control agents such as *Trichoderma viride* to enhance seed vigour and minimize seed- and soil-borne diseases. Structured capacity-building programmes were organized covering critical aspects of scientific paddy production, including integrated crop management (ICM) such as raised nursery bed management, transplanting of young seedlings in line planting for optimal plant population, and balanced nutrient management based on crop growth stages.

Fig. 3: Demonstration of Tricho card & Bracon card

Farmers were also oriented on need-based and timely application of plant protection chemicals, including insecticides, fungicides, and herbicides, following the principles of integrated pest and disease management (IPM). Pest surveillance and eco-friendly management practices were strengthened through the deployment of pheromone traps, Tricho-cards, Bracon-cards, and light traps for effective monitoring of major insect pests.

To further enhance operational efficiency and labour productivity, farmers were facilitated with access to advanced farm mechanization tools and equipment such as customized leaf colour chart (CLCC) for nitrogen management, battery operated sprayer, power tillers, power threshers, reapers, eight-row power transplanters, finger weeders, and cono weeders. Throughout the crop growth period, the programme was reinforced through stage-specific concurrent trainings, regular field visits, and continuous technical backstopping. This ensured real-time problem diagnosis, timely advisory services, and hands on learning, ultimately boosting farmers' technical competence, confidence, and adoption of improved rice production technologies.

Fig. 4: Line transplanting of Swarna sub-1

Table 1: Demonstration of Rice at FFP cluster

Name of the crop	Variety grown	Total cultivated area (ha.)	Total production in (tons)
Paddy	CR Dhan 312	12	75
	Swarna *Sub-1*	12	65
	Sarala	12	67.5
	CR Dhan 911	4	13

Impact:

Fig. 5: Improved package of practices of HYVs paddy cultivation along with crop cutting)

As a result, the demonstrated CR Dhan 312 rice variety achieved an outstanding average yield of 6.25 tons per hectare followed by rice variety Swarna *sub-1* (5.62t/ha), Sarala (4.37t/ha) and CR Dhan 911 (3t/ha). The result indicated the superior performance of improved varieties under field conditions compared with the farmers' traditional cultivars.

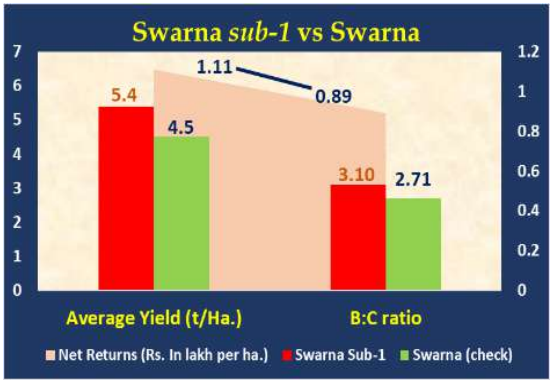

Fig. 6: Comparative analysis with check varieties

The demonstration of CR Dhan 312 resulted in a significant yield enhancement of 28.6% over the farmers existing cultivars, translating in to maximum net returns of Rs. 1,40,650 per hectare. Owing to its superior productivity and efficient input utilization, the variety achieved a high benefit cost (B:C) ratio of 3.65, under scoring its economic viability and suitability for large scale adoption.

Similarly, the submergence tolerance variety Swarna *Sub-1* registered an average yield of 5.4 t/ha representing a 17% yield advantage over the locally cultivated Swarna. This yield improvement resulted in maximum net returns of Rs. 1,11,588 per hectare with a B:C ratio of 3.10 highlighting its potential under flood-prone lowland ecosystems.

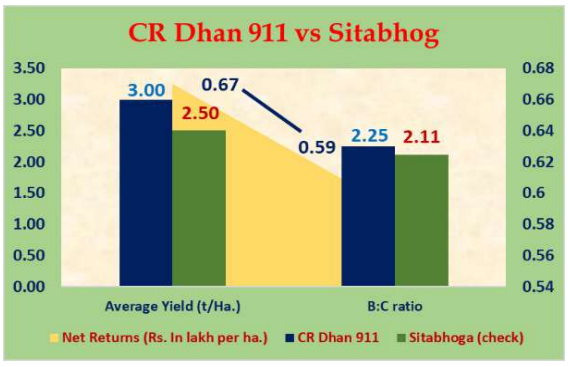

Fig. 7: Comparative analysis of aromatic rice

Sarala also exhibited commendable performance, attaining an average grain yield of 4.3 t/ha. The variety generated maximum net returns of Rs. 82,525 per ha. with a B:C ratio of 2.55 reflecting its stable performance and profitability under improved crop management practices.

Furthermore, the aromatic rice variety CR Dhan 911 (Vasudev) recorded a mean yield of 3 t/ha. registering a substantial yield increase of 20% over the locally grown aromatic cultivar Sitabhoga. Despite its relatively lower yield potential compared to non-aromatic varieties, the higher market price of aromatic rice contributed to net returns of Rs. 66,750 per ha. and an impressive B:C ratio of 2.25 emphasizing its niche market advantage.

Table 2: Comparative economic analysis of rice cultivation

Sl. No.	Items	Per ha average value before FFP (Rs.)	Per ha average value after FFP (Rs.)	Increase in value of paddy	% increase in value of paddy
Input costs (Rs./ ha)					
1.	Seed	1875	1650	-225	-12
2.	Fertilizer	2150	6212	4062	189
3.	Agricultural operation	26300	16625	-9675	-37
4.	Machinery	4500	18450	13950	310
5.	Misc.	1000	7187	6187	619
Total input cost		35825	50124	14299	40
Returns (Rs./ ha)					
6.	Main produce (grain yield)	52500	174375	121875	232
7.	Bye-product (straw yield)	10938	0	-10938	-100
Total return		63438	174375	110937	175

Table 3: Variety-wise economics of rice cultivation

Sl. No.	Particulars	CR Dhan 312	Swarna ***sub-1***	Sarala	CR Dhan 911
Costs & returns (Rs./ ha)					
1.	Seed	1650	1650	1650	1800
2.	Organic manure	4050	4050	4050	4050
3.	Fertilizer and micronutrient	6200	6200	6200	6200
4.	Plant protection chemicals	750	750	750	750
5.	Nursery raising	1750	1750	1750	1750
6.	Ploughing	6250	6250	6250	6250
7.	Levelling and *bunding*	2000	2000	2000	2000
8.	Transplanting	12500	12500	12500	12500
9.	Intercultural operations	7500	7500	7500	7500
10.	Harvesting, transportation etc.	10450	10450	10450	10450
Total cost of cultivation		53100	53100	53100	53250
Gross return		193750	164688	135625	120000
Net return		140650	111588	82525	66750
Benefit-cost ratio		**3.65**	**3.10**	**2.55**	**2.25**

Overall, the results highlight that varietal replacement with location-specific, high-yielding rice varieties substantially improved both productivity and profitability, reinforcing the effectiveness of the Farmer FIRST Programme's participatory approach in enhancing on-farm performance.

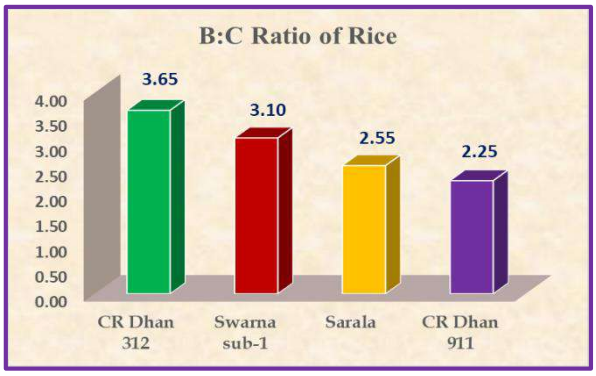

Fig. 8: B-C ratio of different paddy varieties

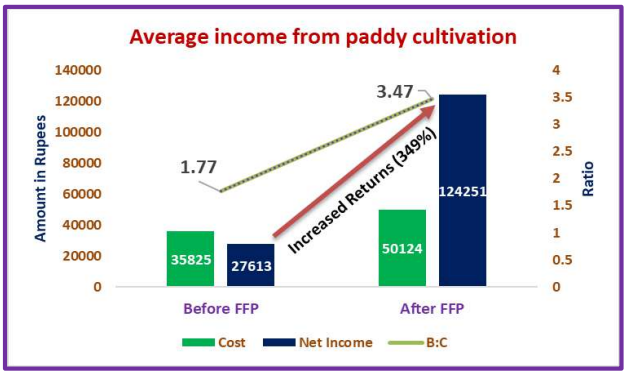

Fig. 9: Average income from paddy cultivation

Horticulture based module:

The farmers in these villages traditionally practiced seasonal vegetable cultivation during the pre and post-*kharif* periods in rice-based cropping systems. However, vegetable production was largely dependent on local landraces and characterized by the non-adoption of scientific crop management practices. Small and marginal farmers, in particular, exhibited limited awareness regarding high-yielding and hybrid vegetable varieties, along with inadequate knowledge of balanced nutrient management, integrated pest and disease management, and scientific post-harvest handling techniques. Consequently, vegetable cultivation remained low-input, low-output, resulting in marginal economic returns.

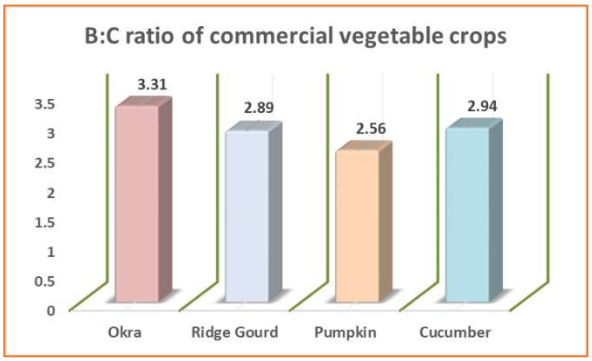

Fig. 10: B-C ratio in different vegetable cultivation

To address these constraints and enhance vegetable productivity and farm profitability, a targeted intervention was implemented focusing on the introduction of improved, climate-resilient, and market-oriented vegetable varieties coupled with the adoption of Good Agricultural Practices (GAPs). The intervention emphasized varietal diversification and improved crop management to optimize yield and income. During the year 2024-25, high-yielding and hybrid vegetable varieties including Okra (*var. Shivanshi*), Ridge Gourd (*var. ASRG 60*), Pumpkin (*var. Paradise*), and Cucumber (*var. Rainy Special*) were demonstrated over an area of 16 hectares. A total of 77 farmers and farm women were supported through the distribution of quality seeds as critical production inputs. Beneficiaries were systematically

trained and motivated to adopt pre-sowing seed treatment and seedling root-dip treatment using appropriate bio-agents and fungicides to improve germination, enhance seedling vigour, and reduce early-stage pest and disease incidence. Throughout the cropping season, farmers received continuous technical backstopping, supported by capacity-building programmes, field demonstrations, and regular advisory services covering nutrient scheduling, pest surveillance, and crop protection measures.

Impact:

Adoption of improved vegetable varieties led to notable increases in both yield and income. Okra production reached 128 quintals from 0.91 hectares, reflecting a 44% increase over the traditional yield of 88.7 quintals, with income rising by 92% to Rs. 5,12,000 compared to Rs. 2,66,100 previously. Similarly, ridge gourd yielded 140 quintals from 1.60 hectares which is 34% higher than the traditional yield of 104 quintals resulting in a 79% increase in income to Rs. 3,13,440. Pumpkin cultivation produced 675 quintals from 3.60 hectares, a 41% improvement over the 479 quintals from traditional varieties, with income surging by 111% to Rs. 4,79,160. Cucumber yields also saw a 37% rise, reaching 184.3 quintals from 1.18 hectares compared to 135.11 quintals earlier, boosting income by 91% to Rs. 3,37,775. These results highlight the significant benefits of varietal replacement in enhancing productivity and profitability in vegetable farming.

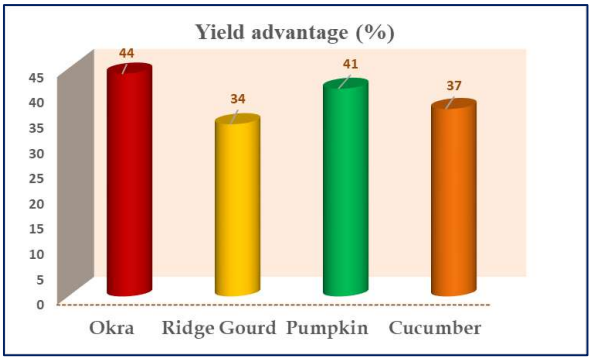

Fig. 11: Yield advantage in vegetable crops

Table 4: Demonstration of vegetables at FFP cluster

Sl. No.	Vegetable grown	Area (ha)	Total yield (qt./ha)	Sale price (Rs./kg)	Total income (Rs./ha)
1.	Okra	0.91	128	40	511875
2.	Ridge gourd	1.60	140	40	560000
3.	Pumpkin	3.60	675	15	1012500
4.	Cucumber	1.18	184.3	35	737500

Table 5: Yield advantage (% increase) of vegetable as influenced by adoption of technology

Sl. No.	Crop	Avg. yield (t/ha) (Before FFP)	Avg. yield (t/ha) (After FFP)	Yield advantage (%) after technological intervention
1.	Okra	9.75	14.06	44
2.	Ridge Gourd	6.53	8.75	34
3.	Pumpkin	13.31	18.75	41
4.	Cucumber	11.45	15.63	37

Table 6: Economics of vegetable cultivation (Rs./ ha)

Sl. No.	Particulars	Okra (Shivanshi)	Ridge gourd (Akshaya)	Pumpkin (Paradise)	Cucumber (Rainy Special)
1.	Seed cost	21875	6250	20000	12500
2.	Land Preparation	15625	21875	15000	15625
3.	Seed treatment, preparation of nursery beds and sowing	3906	3750	3750	4687
4.	Irrigation	15625	12500	12500	15625
5.	Applications of organic manures and FYM	7812	9375	12500	9375
6.	Application of fertilizers & micronutrient	23437	15625	15000	25000
7.	Plant protection chemicals	14062	15625	7500	31250
8.	Wages	62500	31250	18750	93750
9.	Harvesting, transport, and other expenses	5000	5000	5000	5000
Total cost		169844	121250	110000	212813
Gross return		562500	350000	281250	625000
Net return		392656	228750	171250	412188
Benefit-cost ratio		**3.31**	**2.89**	**2.56**	**2.94**

Table 7: Yield attributing characters and economics in vegetable cultivation

S. No.	Crop	Avg. wt. of fruits (g)	Avg. no. of fruits/ plant	Yield (t/ha)	Cost of cultivation (Rs./ha)	Total return (Rs./ ha)	B:C ratio
1.	Okra	12.56	14.94	14.06	169844	562500	3.31
2.	Ridge gourd	179.80	13.08	8.75	121250	350000	2.89
3.	Pumpkin	3850.6	5.27	18.75	110000	281250	2.56
4.	Cucumber	168.5	22	15.63	212813	625000	2.94

This module introduced a range of advanced technologies that have significantly enhanced crop yields

Fig. 12: Improved package of practices of HYVs of vegetable crops during pre-kharif and rabi season

Cultivation of commercial vegetable crops through trellis

Sri Bimbadhara Samal and Chaturbhuja Bhuyan are exceptionally innovative farmers, have introduced the ground breaking Commercial Single Row Nylon Net Trellis technique to the cultivation of bitter gourd and pointed gourd. This marks the first-ever application of this advanced method on a large commercial scale, setting a new benchmark in vegetable farming. They have transformed the way these crops are grown, providing a more efficient and effective means of cultivation that significantly enhances both productivity and quality. The nylon net trellis system facilitates vertical vine growth, better aeration, and enhanced exposure to sunlight, resulting in improved fruit quality and reduced disease incidence. They were provided improved variety of Pointed gourd saplings and bitter gourd seeds along with nylon net for conducting trellis cultivation while providing training cum capacity building programme in trellis cultivation to concerned farmer.

Impact:

Due to adoption of trellis method, they have witnessed extraordinary financial success, earning a net income ranging from Rs. 4 to 5 lakh per ha each year from the cultivation of pointed gourd. This innovative approach has not only improved crop yields but has also opened new avenues for substantial income in the agricultural sector. Moreover, in the case of bitter gourd, the technique has led to impressive earnings, with a net income of Rs. 2.5 to 3.5 lakh per ha annually. Their visionary method is a testament to the immense potential for economic growth within the commercial vegetable farming industry, showing how modern

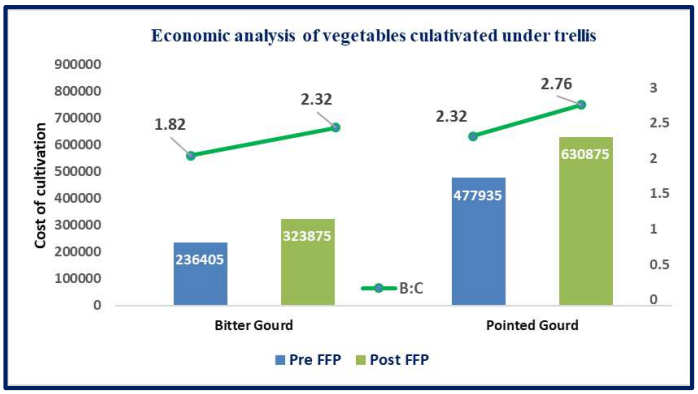

Fig. 13: Economic analysis of vegetable crops under trellis

farming techniques can lead to both enhanced productivity and greater financial stability for farmers.

Table 8: Economic analysis of pointed gourd and bitter gourd under Trellis cultivation

Sl. No.	Particulars	Bitter gourd (US 1315)	Pointed gourd (Swarna Alaukik)
Costs & returns (Rs./ha)			
1.	Seed cost	37500	31250
2.	Land Preparation	15625	15625
3.	Seed treatment, preparation of nursery beds and sowing	1000	1000
4.	Trellis	37500	37500
5.	Irrigation	15625	18750
6.	Intercultural operations		
7.	Applications of organic manures and FYM	9375	15625
8.	Application of fertilizers & micronutrient	31250	31250
9.	Plant protection chemicals	37500	46875
10.	Wages	93750	156250
11.	Staking		
12.	Harvesting, transport, and other expenses	5000	5000
Total cost		284125	359125
Gross return		608000	990000
Net return		323875	630875
Benefit-cost ratio		**2.14**	**2.76**

Fig. 14: Cultivation of vine vegetables under nylon net trellis method of cultivation

Cultivation of vegetable under protected method of cultivation under horticulture based module

Under this module, farmers adopted protected cultivation of high-value commercial vegetables, particularly capsicum (*var. Rajdhani*), to enhance crop productivity, input-use efficiency, and farm profitability. The intervention aimed at income augmentation and crop diversification through the adoption of precision horticulture technologies.

As part of the essential input support system, selected farmers were supplied with quality seed packets at the rate of one packet per 384 sq. ft. area, ensuring optimum plant population and uniform crop establishment. In addition, critical infrastructure in the form of green shade-net houses was provided to facilitate protected cultivation, enabling regulation of microclimatic factors such as temperature, humidity, and light intensity for improved crop performance.

Fig. 15: Intervention of capsicum under protected cultivation

Beyond input support, farmers were sensitized and capacity-built through hands-on training programmes on construction and management of shade-net structures, along with scientific nursery raising and production of healthy, disease-free capsicum seedlings. Emphasis was also laid on the adoption of Integrated Pest Management (IPM) practices, including cultural, mechanical, biological, and need-based chemical control measures, to ensure sustainable pest management, reduced pesticide load, and higher marketable yields.

Table 9: Economic analysis of capsicum under protected cultivation method (0.22 guntha)

Sl. No.	Particulars	Amount (Rs.)
Costs & returns (Rs.)		
1.	Seed cost	200
2.	Land Preparation	150
3.	Seed treatment, preparation of nursery beds and sowing	80
4.	Shed net structure	1000
5.	Irrigation	100
6.	Intercultural operations	300
7.	Applications of organic manures and FYM	500
8.	Application of fertilizers & micronutrient	200
9.	Plant protection chemicals	150
10.	Wages	800
Total cost		**3480**
Gross return		12000
Net return		8520
Benefit-cost ratio		**3.44**

Impact:

The module resulted in the successful adoption of protected cultivation of capsicum (var. Rajdhani) over an area of 0.22 guntha, leading to higher yield and better-quality produce. Farmers effectively utilized shed-net structures, scientific nursery management, and Integrated Pest Management (IPM) practices, which reduced pest incidence and improved

crop performance. The intervention generated a gross return of Rs. 12,000 and a net return of Rs. 8,520, achieving a high benefit–cost ratio of 3.44, thereby demonstrating the economic viability of protected vegetable cultivation while enhancing farmers' skills, income, and crop diversification.

Animal Husbandry Module:

This module is designed to enhance livestock management, boost productivity, and foster sustainable farming practices. The goal is to raise farm incomes, improve animal welfare, and strengthen rural livelihoods. This module is designed to support farmers with small landholdings by providing alternate source of farm income from dairy or animal husbandry. It highlights alternative avenues such as livestock rearing—including poultry, dairy, and other related activities—as viable sources of additional earnings. This module benefited the beneficiaries through number of interventions such as:

Dual purpose backyard poultry: A dual-purpose backyard poultry initiative featuring the Vanaraja breed was introduced to help farmers to boost their income beyond agriculture. Under this intervention, each farmer received 40 Vanaraja chicks along with essential support materials such as feed, feeders, drinkers, medicines, and vaccines to ensure effective poultry rearing. A training-cum-demonstration program was organized to educate fellow farmers on proper vaccination techniques aimed at reducing poultry mortality rates. The program also motivated farmers to build dedicated poultry shelters to enhance overall productivity.

Fig. 16: Distribution of poultry chicks along with other inputs

Impact:

Farmers experienced a significant boost in meat production (100 kg) and egg yield (2,000 eggs), leading to a net income of Rs. 21,040 from just 40 poultry birds. This represents approximately a 33% increase in income compared to traditional local breeds. This achievement has been particularly beneficial for landless farmers and women from marginalized communities, providing them with improved economic prospects and greater empowerment.

Table 10: Economic analysis of dual purpose backyard poultry farming (Per 40 birds)

Sl. No.	Particulars	Quantity	Unit Price	Total
Costs & returns (Rs.)				
1.	Chicks	40 nos.	30	1200
2.	Feed	120 kg.	50	6000
3.	Feeder	1 no.	140	140
4.	Drinker	1 no.	120	120
5.	Medicine			500
Total cost				**7960**
Benefits				
6.	Eggs	2000 nos.	7	14000
7.	Meat	100 kg.	150	15000
Gross return				**29000**
Net return				**21040**
Benefit-cost ratio				**3.64**

Fig. 17: Rearing and vaccination of poultry chicks in scientific method

Aquaculture practice: The Farmer FIRST Programme has made a notable impact in the field of aquaculture by fostering innovation and promoting sustainable practices. Through hands-on training, farmers were equipped with advanced aquaculture skills, and innovative fish farming techniques were demonstrated across 2 hectares of land. Each participating farmer received essential inputs to support cultivation in their own ponds. A total of 25 farmers and farm women were provided with high-quality fingerlings of Rohu as critical inputs. Prior to the intervention, they were trained and encouraged to adopt these improved fish varieties along with recommended best practices to enhance the efficiency and productivity of their fish farming operations.

Table 11: Economic analysis of Fish farming (0.2 acre)

Sl. No.	Particulars		Quantity	Unit Price (Rs.)	Total
Costs (Rs.)					
1.	Fingerlings		800 nos.	6/fingerling	4800
2.	Feed		90 kg	50/kg	4500
3.	Phytoplankton's formation	Urea	96 kg	13/kg	1248
4.		DAP	144 kg	35/kg	5040
5.		FYM	520 basket	0/basket	0000
6.	Lime		64 kg	50/kg	3200
Total cost					**18788**
Benefit	Fish		760 kg	150/kg	114000
Gross return					**114000**
Net return					**95212**
Benefit-cost ratio					**6.06**

Impact:

As a result of the adoption of improved practices, farmers achieved an impressive annual yield of 3,800 kg per acre, generating a net income of Rs.4,76,060 per acre and a high benefit-cost (B:C) ratio of 6.06. These transformed methods have promoted not only increased productivity and profitability but also greater resilience and environmental sustainability.

Demonstration of mineral mixture feeding to livestock: As part of the Farmer FIRST Programme, a demonstration on mineral mixture supplementation for dairy cows was conducted to address common nutrient deficiencies in their regular diet. Aimed at improving livestock nutrition and ensuring better quality milk production, the programme included a training-cum-demonstration session on the use of nutritional supplements. During this initiative, 450 kg of mineral mixture (*Agrimin Forte*) was distributed among 150 farmers to support healthier and more productive dairy animals.

Fig. 18: Distribution of mineral mixture for cows

Impact:

Due to feeding of mineral mixture to lactating cows, milk yields increased by approximately 1.5 kg per cow—a gain that boosts farmers' income. By ensuring cows receive essential macro- and micro-nutrients (such as calcium, phosphorus, magnesium, trace elements like copper, zinc, and selenium, along with vitamins), the supplement improved udder health, milk fat and protein levels, and overall cow vitality. Consequently, farmers enjoy higher productivity and profitability, while consumers benefit from more nutritious, safer dairy products.

Fig. 19: scientist farmer interaction

Integrated Farming System (IFS) Module:

Farmers Bibhu Prasad Panda and Balaram Jena have successfully implemented an integrated farming system (IFS) model, showcasing a fish-duck-cow enterprise. Mr. Panda, in particular, has demonstrated the full spectrum of the Farmer FIRST Programme (FFP) in one cohesive area. He introduced arecanut and lemon in 0.88 acre under the horticulture module, preparing the soil with nutrient-rich vermi-compost derived from his livestock sector in which he reared 3 numbers of cows under animal husbandry module. Additionally, he integrated ducks (100 nos.) into the system, utilizing their excreta as valuable input for the fingerling in the pond. To enhance this process, he adopted bio-floc technology, converting bottom fish into fingerlings, some of which were raised in his own pond, while others were sold in the open market.

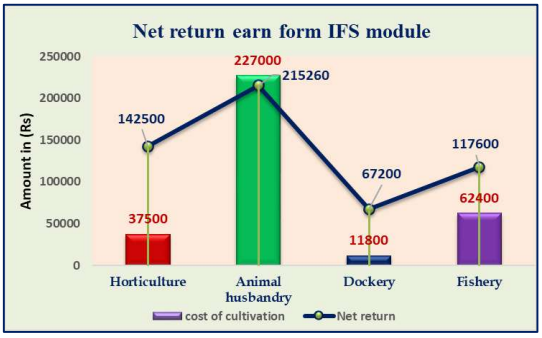

Fig. 20: Net return from different sector of IFS module

Impact:

Through the implementation of the IFS module, beneficiary farmers realized a substantial enhancement in annual net farm income, amounting to Rs.5,42,560, with a robust benefit–cost (B:C) ratio of 2.60. The module not only improved overall farm profitability but also facilitated on-farm employment generation by optimally engaging family labour. Activity-wise economic analysis revealed that the livestock component emerged as the most remunerative enterprise, registering the highest net returns of Rs.2,15,260, followed by arecanut-based plantations, which contributed a commendable net income of Rs.1,42,500.

Fig. 21: Demonstration of IFS module

Table 12: Economic analysis of IFS model demonstrated under FFP

Horticulture (0.88 acre)				Animal Husbandry (3 number of cows)				Duckery (100 birds)				Fishery (0.16 acre)			
Particulars	**Qty.**	**Rate**	**Amt.**	**Particulars**	**Qty.**	**Rate**	**Amt.**	**Particulars**	**Qty.**	**Rate**	**Amt.**	**Particulars**	**Qty.**	**Rate**	**Amt.**
Cost of cultivation/ production															
Lemon	100	100	10000	Feed	54.75 qt.	4000	219000	Ducks	100	38	3800	Fingerlings	3000 pcs	15	45000
Arecanut	100	50	5000	Ca, Fe, Injection, mineral	Lumpsum		5500	Feed	1 qt.	5000	5000	Feed	90 kg	60	5400
Labour	50	350	17500	Electricity & others	Lumpsum		2500	vaccine	Lump sum		3000	Miscellaneous			12000
Fertilizers & Hormones	lumpsum		5000												
Total	**37500**				**227000**				**11800**				**62400**		
Yield (Lemon)	100000 pieces	1.5	150000	Yield (milk)	11340 ltr.	39	442260	Yield (Meat)	200 kg	150	30000	Yield (Fries)	6 qt.	30000	180000
Yield (Arecanut)	30000 pieces	1.4	30000					Yield (eggs)	7000 numbers	7	49000				
Gross income from whole IFS model (Rs.)			**881260**	**Net Income**				**542560**			**B:C**			**2.60**	

Enterprise Module:

Badi Production: Mechanized *badi* production was rolled out across selected village groups, positioning it as a value-added enterprise to promote women's entrepreneurship and enhance household incomes. We organized intensive, hands-on training and demonstration workshops for 4 women farmers group. To empower them from the outset, every women farmers group was equipped with essential machinery including a grinder, a *badi*-forming dropper, and a packaging unit enabling them to launch productive micro-enterprises confidently.

Fig. 22: Production of badi by women farmers

Table 13: Economic analysis of *badi* production under FFP

Sl. No.	Particulars	Quantity	Rate	Amount
Particulars cost (Rs.)				
1.	Black gram	600kg.	Rs.90/ Kg.	Rs.54000
2.	Machine accessories cost (It will lasted about 10 years)	1 nos.	Rs.850/year	Rs.1000
3.	Electricity cost	275 unit	Rs.5/ unit	Rs.1375
4.	Labour Cost	120 Men days	Rs.150/ day	Rs.18000
5.	Miscellaneous (bag, ponny, etc.)	-	-	Rs.1000
	Total cost			Rs.75,375
	Total Benefit			
6.	Yield (*badi*)	480 kg	250	Rs. 1,20,000
	Gross return			Rs. 1,20,000
	Net return			Rs.44,625
	Benefit-cost ratio			1.59

Impact:

A remarkable success story comes from the *Madan Mohan Self-Help Group (SHG)* in Malihata village, *M BABA Badi Production* in Ganapur village, *Shriya Udyog* in Ganeswarapur and *Maa Tarini SHG* in Gopinathpur village under Salipur Block, District Cuttack, Odisha. These groups consist of 5 members each has harnessed the power of intervention to drive economic empowerment. They operate four *badi*-making machines, including a grinder for pest and a *badi* dropper, producing an impressive yield of 1920 kg of *badi* annually. Selling at Rs. 250 per kg in the local market, the group generates a net annual return of Rs. 1,78,500, allowing each group to earn Rs. 44,625 per year, greatly improving their livelihoods and financial independence.

Mushroom Production: Paddy straw mushroom farming was introduced as a profitable enterprise in adopted villages cluster for promoting entrepreneurship and ensuring family nutritional security. Intensive training cum demonstration were conducted for farmers and as critical input to demonstrate and initiate production, they were provided each with 2400 spawn bottle for paddy straw mushroom and poly sheets.

Fig. 23: Production of mushroom

Table 14: Economic analysis of paddy straw mushroom cultivation under FFP (per family)

Sl. No.	Particulars	Quantity	Rate (Rs.)	Amount (Rs.)
Costs & returns (Rs.)				
1.	Paddy straw bundles	31200 Nos	2.50/ bundle	78000
2.	Mushroom spawn	2400 bottles	16.00/ bottles	38400
3.	Polythene sheet	10 Kg	220/ Kg	2200
4.	Gram flour	360 Kg	66/ Kg	24000
5.	Labour cost (family labour)	160 Men days	350/ day	56000
6.	Misc. (bag, tags, sprayer etc.)	-	-	4000
Total cost				2,02,600
	Yield	1920 Kg	220	4,22,400
Gross return				4,22,400
Net return				2,19,800
Benefit-cost ratio				2.08

Impact

As a result, a total yield of 1920 kg of mushroom was obtained with a net income of Rs. 2,19,800/- per family and the benefit: cost ratio was worked out to be 2.08.

Fig. 24: Training programme and field monitoring of mushroom farming

Vermi-compost production: Under Farmer FIRST Programme, vermicomposting has become a significant innovation, transforming the way farmers handle organic waste, improve soil fertility, and boost farm incomes while enhancing their livelihoods. Through this initiative, we supply farmers with essential resources like vermi beds and high-quality earthworms to facilitate the process. Farmers use organic waste materials such as kitchen scraps, agricultural residues, green waste, and cow dung to produce nutrient-rich compost. Each vermi bed, lasting for three cycles, yields an average of 2400 kg of vermi-compost and generates a net profit of Rs. 20,300 over the three cycles, with benefit-cost (B:C) ratio of 2.29.

Fig. 25: vermicomposting and its harvesting

Table 15: Economic analysis of Vermicomposting under FFP

Sl. No.	Particulars	Quantity	Rate (Rs.)	Amount (Rs.)
		Costs & returns (Rs.)		
1.	Vermicompost bed	1 bed (2 year lifespan)	2000	2000
2.	Cost of the shed	One shed (5 year lifespan)	1000	1000
3.	Cow dung	3 tonnes	1200	3600
4.	Earthworm	3 Kg	600	1800
5.	Labour	18 Man days	350	6300
6.	Miscellaneous			1000
	Cost of production			15,700
Total Benefit				
7.	Vermicompost	2400	12	28800
8.	Earthworm	12	600	7200
	Gross return			36000
	Net return			20,300
	B:C Ratio			2.29

Bee Keeping:

Under the Farmer FIRST Programme, farmers were trained with the necessary skills for bee keeping. By providing a complete package of support, including productive bees, protective clothing, hive tools, smokers, and a detailed guide on best practices, the programme helped the farmers diversify their income streams and enhance their livelihoods through bee rearing. As a result, farmers participating in the beekeeping initiative achieved impressive yields, with an average of 120 kg of honey harvested from 20 bee boxes in a single cycle. This translated into a remarkable net income of Rs. 56,000 per family, with an incremental benefit-cost (B:C) ratio of 2.40, highlighting the significant economic potential of bee hiving in boosting farmers' financial well-being.

Paneer making:

A women-centric intervention was implemented to demonstrate value addition in dairy-based enterprises, with a special focus on mechanized paneer production at the household level. The intervention highlighted the scope of secondary agriculture and agri-allied activities in enhancing rural livelihoods, particularly for farm women. The primary objective of this initiative was to ensure sustainable and diversified livelihood opportunities for women farmers by integrating small-scale dairy processing technologies.

Fig 26: Demonstration of spices pulverization to women farmers

To operationalize the intervention, nine Women Farmer Groups (WFGs) were constituted, each comprising five women members actively engaged in animal husbandry and dairy management. As a critical technological input, nine paneer-making units equipped with paneer pressing machines were distributed one to each group to promote efficient, hygienic, and standardized production.

Further, to enhance technical proficiency, machinery management, and product quality, the participating women farmers were imparted hands-on capacity building training on *"Production and Value Addition of Milk and Milk Products"*. The training emphasized Good Manufacturing Practices (GMP), quality control, value chain development, and enterprise management, thereby enabling the women to adopt commercial dairy processing as a viable income-generating activity.

Table 16: Economic analysis of paneer making (9 groups) under enterprise based module

Sl. No.	Particulars	Quantity	Rate (Rs.)	Amount (Rs.)
Costs & returns (Rs.)				
1.	Milk	750 ltr (50 ltr @ 15 days)	40	30000
2.	Paneer press machine per day charge for custom hiring	15 days	20	300
3.	Misc. (gas, vinegar etc.)			450
	Cost of production			30750
Total Benefit				
	Paneer	150 kg	300	45000
	Gross return			45000
	Net return			14250
	Benefit-cost ratio			1.46

Impact:

As an outcome of the intervention, the participating farm women successfully enhanced their farm income through dairy value addition. Within a short production cycle of 15 days initially, the groups generated a gross income of Rs. 45,000 from mechanized paneer production, achieving a benefit - cost (B:C) ratio of 1.46, which clearly indicates the economic viability and profitability of the enterprise.

In comparison to conventional direct milk marketing, which would yield only Rs.30,000 in 15 days, the adoption of on-farm dairy processing and value addition generated an additional Rs.15,000 per group within the same period. This resulted in an incremental income of Rs.3,000 per farmer per fortnight, increasing individual earnings to Rs.9,000 per 15 days from paneer production, as against Rs.6,000 from raw milk sales. The intervention clearly highlights the income augmentation potential of secondary agriculture, dairy entrepreneurship, and collective action, contributing to enhanced livelihood security and economic empowerment of farm women.

Spices pulverizing:

A women-oriented value addition intervention on spice pulverization was implemented to promote secondary agriculture, post-harvest processing, and agri-enterprise development among rural households. Under this programme, Women Self-Help Groups (WSHGs), each consisting of 10 women members, were mobilized to adopt small-scale spice processing as a viable income-generating activity. To strengthen the production system and improve operational efficiency, two mechanized spice pulverizing units were provided to each group as critical inputs, facilitating hygienic, uniform, and time-efficient grinding of spices such as turmeric, chilli, coriander, cumin, and blended masala products.

Fig 27: Demonstration of spices pulverization to women farmers

The intervention was designed to enhance farm and non-farm income through value chain integration, particularly for women engaged in off-farm livelihood activities, while simultaneously minimizing post-harvest losses and improving the market value and shelf life of spice produce. To ensure product quality, standardization, and sustainability of the enterprise, the women groups were imparted hands-on training on an improved package of practices. The technical modules covered selection of quality raw materials, scientific cleaning and grading, optimum drying and moisture management, efficient pulverization techniques, adherence to good manufacturing practices (GMP) and hygiene standards, scientific packaging and storage, and basic market-oriented enterprise management.

Overall, the initiative significantly contributed to women empowerment, income diversification, and strengthening of local spice value chains, reinforcing the role of farm women in agri-processing and rural entrepreneurship.

Partnership and capacity building:

Under this initiative, women from Self-Help Groups (SHGs) were empowered to create value-added products from dairy and agricultural produce, such as making paneer and pulverizing various spices. This not only enhanced the value of their outputs but also provided an additional source of income beyond traditional farming. Several farmers excelled in vermi-compost production after receiving training on the necessary technologies. To support them during the initial stages, they were provided with essential resources, including portable vermi beds and vermi worms. As a result, these farmers now produce an average of 20 quintals of vermi-compost. Additionally, they have embraced vermiculture, harvesting 10 kg of vermi worms that they sell in local markets. This initiative not only bolstered local vermi-worm sales but also helped streamline the supply chain, improving market access and opportunities for farmers.

Extension service:

I. Training /Workshop Organized

ICAR-CRRI organized an enriching exposure visit for 40 farmers as part of its program, taking them to various esteemed ICAR institutions across Odisha, including CHES, CTCRI, CIWA, and CIFA etc. The primary goal of this visit was to foster mutual-learning among farmers. These organizations highlighted their diverse technological advancements and specialized units, covering areas such as major Indian crops, horticulture, apiculture, and tuber crops. Throughout the visit, farmers had the invaluable opportunity to gain insights from expert scientists, who shared their profound knowledge and expertise, offering valuable guidance on the various practices and innovations in agriculture.

Table 17: Details of on-farm demonstration and field visit carried during the project under FFP

Sl. No.	Training details	Date	Place	No. of participants
1.	Training-cum-seed distribution programme	06.01.2017	Satyabhamapur	27
2.	Training programme on backyard poultry production for women farmers	08.05.2017	Laxminarayanpur	46
3.	Training programme on duck farming for women farmers	12.07.2017 & 22.07.2017	Satyabhamapur	118
4.	Training-cum-demonstration programme on power tiller	09.08.2017	Biswanathpur	32

5.	Training-cum-demonstration programme on power tiller	17.08.2017	Ganeswarapur	15
6.	Training-cum-demonstration programme on rice transplanter	26.08.2017	Satyabhamapur	17
7.	Training-cum-kharif workshop	08.09.2017	Satyabhamapur	202
8.	Training-cum-demonstration programme on mushroom cultivation	21.11.2017	Satyabhamapur	144
9.	Training-cum-demonstration of ripper	20.12.2017	Satyabhamapur	11
10.	Training-cum-demonstration on vermi-compost	15.01.2018	Satyabhamapur & Laxminarayanpur	69
11.	Farmers meeting for mango and banana	03.03.2018	Satyabhamapur	45
12.	Training programme on backyard poultry & duck farming for rural livelihood & nutritional security	27.07.2018	Satyabhamapur	80
13.	Training-cum-demonstration programme on power transplanter	20.08.2018	Biswanathpur	45
14.	Training programme on paddy straw mushroom cultivation as an enterprise	22.09.2018	Satyabhamapur	125
15.	Training programme on quality rice seed production technology and post-harvest management practices	02.11.2018	Satyabhamapur	102
16.	Training programme on profitable farming of oyster (dhingri) mushroom	11.12.2018	Satyabhamapur	124
17.	Field visit and interaction meet by the nodal officer, FFP, ICAR-ATARI, Kolkata	13.12.2018	Satyabhamapur	52
18.	Training programme on freshwater aquaculture for enhancing farmers' income	21.12.2018	Satyabhamapur	37
19.	Workshop on impact assessment of farmer FIRST programme under ICAR-ATARI, Kolkata and ICAR-ATARI, Hyderabad	01.03.2019-02.03.2019	ICAR-NRRI	27
20.	Farmers training programme on scientific crop management practices for commercial vegetable production	13.03.2019	Satyabhamapur	103
21.	Training-cum-demonstration on raising mat type nursery	30.07.2019	Laxminarayanpur	13
22.	Training-cum-demonstration on operations and management of 8 row power transplanter	13.08.2019	Laxminarayanpur	15
23.	Training-cum-demonstration on paddy drum seeder	20.08.2019	Ganeswarpur	10

24.	Training programme on paddy straw mushroom cultivation for ensuring family nutrition and income	09.09.2019	Biswanathpur	137
25.	Training programme on intergrated disease and pest management in kharif rice	28.09.2019	Satyabhamapur	107
26.	Training programme on protected cultivation in horticulture	27.11.2019	Satyabhamapur	89
27.	Pre-rabi workshop cum interaction meet oin general feedback of beneficiaries	10.01.2020	Satyabhamapur	41
28.	Field visit cum interaction meet by monitoring team from ICAR-DKMA	19.02.2020	Satyabhamapur	22
29.	Training cum demonstration of paddy straw mushroom cultivation	17.08.2020	Satyabhamapur	12
30.	Training cum demonstration oin Tricho cards and Bracon cards for management of insect pests in rice	09.09.2020	Satyabhamapur	21
31.	Training cum demonstration on pond based fresh aquaculture	11.09.2020	Laxminarayanpur	23
32.	Training cum demonstration on backyard poultry farming breeds like vanaraja and RIR	06.10.2020	Laxminarayanpur	24
33.	Skill training programme on improved vegetable production technologies	07.01.2021	Satyabhamapur	46
34.	Training cum demonstration on paddy straw mushroom for ensuring nutrition and income	17.02.2021	Satyabhamapur	87
35.	Training programme on production management of livestock & poultry	22.03.2021	Satyabhamapur	64
36.	Training cum demonstration on bee keeping for entrepreneurship development	12.04.2021	Satyabhamapur	22
37.	Training cum demonstration on NRRI light trap for rice insect pest management	11.08.2021	Satyabhamapur	41
38.	Skill training on integrated crop management techniques in *kharif* rice	23.08.2021	Satyabhamapur	83
39.	Skill training on integrated pest management in rice	04.09.2021	Satyabhamapur	81
40.	Field visit and farmers' interaction by Dr. V. V. Sadamate, Hon'ble member, RAC	18.10.2021	Satyabhamapur	115
41.	Training programme on use of improved technologies in horticultural	30.12.2021	Biswanathpur	75

	crops for enhancing farm productivity & profitability			
42.	Field visit, monitoring & on-site documentation and farmers' interaction meet by FFP team, ICAR-NAARM Hyderabad	09.03.2022	Satyabhamapur	89
43.	Training cum demonstration on commercial paddy straw mushroom farming	09.03.2022	Biswanathpur	100
44.	Training programme on deficiency syndromes in animal and birds: prevention and medication	06.04.2022	Satyabhamapur	104
45.	Member-cum-shareholder mobilization programme with Nirmalya FPC ltd.	09.05.2022	Satyabhamapur	84
46.	Training-cum-demonstration on paddy seed treatment with Trichoderma Bioagent and *kharif* nursery management	27.07.2022	Gopinathpur	51
47.	Training-cum-demonstration on commercial paddy straw mushroom farming	30.07.2022	Malihata	54
48.	Training programme on scientific backyard poultry farming for livelihood and nutritional security	04.08.2022	Gopinathpur	87
49.				
50.	Training programme on fish rearing for enhancing farmer's income	12.09.2022	Gopinathpur	57
51.	Field visit and review meeting by FFP team , ICAR-ATARI, Kolkata	12.01.2023	Gopinathpur	28
52.	Training programme on mushroom cultivation for enhancing farmers' income	02.03.2023	Satyabhamapur	84
53.	Training programme on Feeding & Medication in animals and birds	19.07.2023	Gopinathpur	92
54.	Training programme on Integrated Disease and Pest Management in Rice	13.09.2023	Gopinathpur	70
55.	Skill training-cum-demonstration programme on vermicomposting	10.01.2024	Gopinathpur	37
56.	Field visit and Interaction meet by ICAR-ATARI, Kolkata	23.02.2024	Gopinathpur	123
57.	Pre-kharif Training Programme on Improved Rice Cultivation Practices including seed treatment.	18.06.2024	Gopinathpur	72

58.	Training Programme on Commercial Poultry Production and Nutritional Management in Animals	19.06.2024	Malihata	80
59.	Skill training programme on grafted vine vegetable cultivation	12.09.2024	Malihata	57
60.	Skill training programme on production and value addition of spices and milk products	13.01.2025	Gopinathpur	55
61.	Training-cum-demonstration programme on commercial production of vermi-compost	20.02.2025	Malihata	45
62.	Training-cum-demonstration on paddy straw mushroom cultivation and its value addition	13.03.2025	Gopinathpur	70
63.	Training programme on improved fruit and vegetable production	10.09.2025	Gopinathpur	37

II. Print Media Coverage

ଛତୁ ଚାଷ ପ୍ରଶିକ୍ଷଣ ଓ ପ୍ରଦର୍ଶନୀ

ସାଲେପୁର, ୨୩।୨ (ନି.ପ୍ର.): ସତ୍ୟଭାମାପୁରସ୍ଥିତ କସ୍ତୁରବା ଗାନ୍ଧୀ ଟ୍ରଷ୍ଟ ପରିସରରେ ପାଞ୍ଚଛତୁ ଚାଷ ମାଧ୍ୟମରେ ପୋଷଣ ତଥା ଆୟବୃଦ୍ଧି ସୁନିଶ୍ଚିତତା ଉପରେ ପ୍ରଦର୍ଶନ ଅନୁଷ୍ଠିତ ହୋଇଯାଇଛି। କେନ୍ଦ୍ରୀୟ ଧାନଗବେଷଣା ଅନୁଷ୍ଠାନ

କଟକର ଅଧ୍ୟକ୍ଷ ଡ. ସୁମନ୍ତ କୁମାର ମିଶ୍ର, ଡ. ଶ୍ରୀକାନ୍ତ ନେଳା, ବୈଜ୍ଞାନିକ ଭଜାଳୀଶଙ୍କର ଶତପଥୀ ପ୍ରମୁଖ ଯୋଗଦେଇ ପାଞ୍ଚଛତୁ ଚାଷ ସମ୍ପର୍କରେ ତାଲିମ ଦେଇଥିଲେ। ଏହି କାର୍ଯ୍ୟକ୍ରମରେ କସ୍ତୁରବା ଟ୍ରଷ୍ଟ ପକ୍ଷରୁ ସାଧ୍ୟାରାଣୀ ମଲ୍ଲିକ, ବାସୁଦେବ ରାଉତ, ଶିବନାରାୟଣ ସାମଲ, ରାମଚରଣ ଦାଶ, ସଂଘମିତ୍ରା ରାଉତ, ସଂଗ୍ରାମ ଦେଶରା ପାଣି, ରାମଚନ୍ଦ୍ର ପାଣିଙ୍କ ସମେତ ବହୁ ପୁରୁଷ ଓ ମହିଳା ଆଲୋଚନାରେ ଭାଗନେଇଥିଲେ।

କୃଷି ବୈଜ୍ଞାନିକ - ଚାଷୀଙ୍କ ଆଲୋଚନା

ସାଲେପୁର, ୧୮।୧୦ (ନି.ପ୍ର.) : ସତ୍ୟଭାମାପୁରସ୍ଥିତ କସ୍ତୁରବା ଗାନ୍ଧୀ ସ୍ମାରକନିଧି ଟ୍ରଷ୍ଟ ପରିସରରେ ଜାତୀୟ ଧାନଗବେଷଣା ଅନୁଷ୍ଠାନ କଟକ ଦ୍ୱାରା ପରିଚାଳିତ ଫାର୍ମର ଫାଷ୍ଟ ପ୍ରକଳ୍ପ ଆନୁକୂଲ୍ୟରେ ବୈଜ୍ଞାନିକ ଏବଂ ଚାଷୀମାନଙ୍କ ମଧ୍ୟରେ ଏକ ତିନିଦିନିଆ ଆଲୋଚନାଚକ୍ର ଅନୁଷ୍ଠିତ ହୋଇଯାଇଛି। ଅନୁଷ୍ଠାନର ପ୍ରଧାନ ବୈଜ୍ଞାନିକ ଡ. ସୁମନ୍ତ କୁମାର

ମିଶ୍ରଙ୍କ ସଭାପତିତ୍ୱରେ ଅନୁଷ୍ଠିତ ଏହି କାର୍ଯ୍ୟକ୍ରମରେ ନୂଆଦିଲ୍ଲୀର ଡ. ବି.ବି. ସାଦାମତ ଏବଂ ଡ. ଏ.କେ. ନାୟକ, ଡ. ଜି.ଏ.କେ. କୁମାର, ଡ. ଭଜାଳୀଶଙ୍କର ଶତପଥୀ, ମହେଶ ଚନ୍ଦ୍ର ଶତପଥୀ ପ୍ରମୁଖ ଯୋଗ ଦେଇଥିଲେ। କୃଷି ଅଧିକାରୀ ବିଦ୍ୟୁଶ୍ରୀ ତ୍ରିପାଠୀ, ଟ୍ରଷ୍ଟ ପକ୍ଷରୁ ସାଧ୍ୟାରାଣୀ ମଲ୍ଲିକ, ବାସୁଦେବ ରାଉତ, ଶିବନାରାୟଣ ସାମଲ, ରାମଚରଣ ଦାଶ, ସଂଘମିତ୍ରା ରାଉତ, ସଂଗ୍ରାମ ଦେଶରା ପାଣି, ରାମଚନ୍ଦ୍ର ପାଣିଙ୍କ ସମେତ ବହୁ ଚାଷୀ ଆଲୋଚନାରେ ଭାଗନେଇଥିଲେ।

'ଫାର୍ମର ଫାଷ୍ଟ' ପକ୍ଷରୁ କୃଷକ ପ୍ରଶିକ୍ଷଣ ଶିବିର

ବାରଙ୍ଗ

ଏନ୍.ଆର୍.ଆର୍.ଆଇ. ଉଦ୍ୟାନ କୃଷି ଲାଭଦାୟକ ଉପରେ ତାଲିମ ଶିବିର

କଟକ ସଦର, (ପିଟିଏସ) : ଜାତୀୟ ଧାନ ଗବେଷଣା ଅନୁଷ୍ଠାନ (ଏନ୍.ଆର୍.ଆର୍.ଆଇ.) କଟକ ଦ୍ୱାରା ପରିଚାଳିତ ଫାର୍ମର ଫାଷ୍ଟ ପ୍ରକଳ୍ପ ଆନୁକୂଲ୍ୟରେ ଆଜି ଉନ୍ନତ ଜ୍ଞାନ ଜୈବିକର ବ୍ୟବହାର ଦ୍ୱାରା ଉଦ୍ୟାନ କୃଷିରେ ଉତ୍ପାଦନ ଓ ଲାଭ ବୃଦ୍ଧି ଉପରେ ଏକ ପ୍ରଶିକ୍ଷଣ କାର୍ଯ୍ୟକ୍ରମ ଆଜି ଅନୁଷ୍ଠିତ ହୋଇଯାଇଛି। ଏହି ପ୍ରକଳ୍ପ ଦ୍ୱାରା କଟକ ଜିଲ୍ଲାର ୪ଟି ପୋଷ୍ୟ ଗ୍ରାମ ଯଥା ସତ୍ୟଭାମାପୁର, ବିଶ୍ୱନାଥପୁର, ଗଣେଶ୍ୱରପୁର ଓ ଲକ୍ଷ୍ମୀନାରାୟଣପୁର ଗ୍ରାମରୁ ୧୦୦ରୁ ଊର୍ଦ୍ଧ୍ୱ ଫସଲ ଚାଷୀ ତାଲିମ ନେଇଥିଲେ। ଏଥିରେ ଅନୁଷ୍ଠାନର ପ୍ରଧାନ ବୈଜ୍ଞାନିକ ତଥା ପ୍ରକଳ୍ପର ମୁଖ୍ୟ ଡଃ ସୁମନ୍ତ କୁମାର ମିଶ୍ର, ସ୍ୱାଗତ ଭାଷଣ ଦେବା ସହ ୨୦୧୬ ମସିହାରୁ ତାଲିଥିବା ଏହି ପ୍ରକଳ୍ପ ଆନୁକୂଲ୍ୟରେ ଉପରୋକ୍ତ ୪ଟି ପୋଷ୍ୟ ଗ୍ରାମର ୮ ଶହରୁ ଊର୍ଦ୍ଧ୍ୱ କୃଷି ପରିବାର କୃଷି ଓ ଆନୁଷଙ୍ଗିକ କାର୍ଯ୍ୟରେ ଉପକୃତ ହୋଇଛନ୍ତି ବୋଲି ସୂଚନା ଦେଇଥିଲେ। ଏହି ଶିବିରରେ କେନ୍ଦ୍ରୀୟ ଉଦ୍ୟାନ ଗବେଷଣା କେନ୍ଦ୍ର ଭୁବନେଶ୍ୱରର ମୁଖ୍ୟ ବୈଜ୍ଞାନିକ ଡଃ ଗୋବିନ୍ଦ ଚନ୍ଦ୍ର ଆଚାର୍ଯ୍ୟ ଯୋଗଦେଇ ଉଦ୍ୟାନ କୃଷିରେ ସମନ୍ୱିତ ଫସଲ ପରିଚାଳନା ଉପରେ ବିଶେଷ ଆଲୋକପାତ କରିଥିଲେ। ଅନ୍ୟମାନଙ୍କ ମଧ୍ୟରେ ଏନ୍.ଆର୍.ଆର୍.ଆଇ.ର ବରିଷ୍ଠ ବୈଜ୍ଞାନିକ ଡଃ ଭବାନୀ ଶଙ୍କର ଶତପଥୀ ପ୍ରଧାନମନ୍ତ୍ରୀଙ୍କ ଦ୍ୱାରା ଆହ୍ୱାନ କରାଯାଇଥିବା ଦେଶା ଗାଈର ଗୋବର ଏବଂ ଗୋ ମୂତ୍ରର ମିଶ୍ରଣରୁ ପ୍ରସ୍ତୁତ ଜୀବାମୃତ, ଘନଜୀବାମୃତ ଆଦି ଜୈବିକ ମିଶ୍ରଣ କୃଷିରେ ଉତ୍ପାଦନ ଏବଂ ଉଦ୍ୟାନ କୃଷିରେ ଉପାଦେୟତା ପ୍ରସ୍ତୁତି ଏବଂ ବ୍ୟବହାର ଉପରେ ଆଲୋକପାତ କରିଥିଲେ। ଶିବିରରେ ଉପସ୍ଥିତ ସମସ୍ତ ଚାଷୀଙ୍କୁ ପ୍ରକଳ୍ପ ଦ୍ୱାରା ବିଭିନ୍ନ ପ୍ରକାରର କଲମି ଚାରା ଉତ୍ପାଦି ପ୍ରଦାନ କରାଯାଇଥିଲା। ଏହି ତାଲିମ କାର୍ଯ୍ୟକ୍ରମରେ ଅଗ୍ରଣୀ କୃଷକ ଉଦ୍ଧବ ଚରଣ ପାଢ଼ା, ଶିବ ନାରାୟଣ ସାମଲ, ସଂଗ୍ରାମ କେଶରୀ ପାଣା, ଭୀମ ଚରଣ ଦାସ ପ୍ରମୁଖ ଯୋଗଦେଇଥିଲେ। କାର୍ଯ୍ୟକ୍ରମରୁ ପ୍ରକଳ୍ପର କର୍ମଚାରୀ କୃତିବାସ ନେନା, ଭମାକାନ୍ତ ପରିଡ଼ା, ପୃଶ୍ନା ସୋନାଳୀ ଜେଠା ଓ ବୈରାଗୀ ଚରଣ ଭୋଳ ପ୍ରମୁଖ ପରିଚାଳନା କରିଥିଲେ।

■ କୃଷକ ସମ୍ମାନିତ

ପାଗା,୨୮।୨(ସମିସ): ସାଲେପୁର ବ୍ଲକ୍ ସତ୍ୟଭାମାପୁର ଗ୍ରାମର ଅଗ୍ରଣୀ ଚାଷୀ ଶିବନାରାୟଣ ସାମଲ ସାଲେପୁର ପାଇଁ ଗୌରବ ଆଣିଛନ୍ତି। ଉନ୍ନତ ପ୍ରଣାଳିର କୃଷି ପାଇଁ ଭାରତ ସରକାରଙ୍କ କେନ୍ଦ୍ର କୃଷି ଓ କୃଷକ କଲ୍ୟାଣ ମନ୍ତ୍ରୀ ଜୈଲାସ ଚୌଧୁରୀଙ୍କ ଠାରୁ ନୂଆଦିଲ୍ଲୀ ଠାରେ ପୁରସ୍କାର ଗ୍ରହଣ କରିଛନ୍ତି।

ପ୍ରମେୟ

ଚାଷୀଙ୍କୁ ପୁରସ୍କୃତ କଲେ କେନ୍ଦ୍ରମନ୍ତ୍ରୀ

ଜଗତପୁର,୧୩।(ଆପ୍ର): ସାଲେପୁର ବ୍ଲକ ସତ୍ୟଭାମାପୁର ପଞ୍ଚାୟତ ସତ୍ୟଭାମାପୁର ଗ୍ରାମର ଶିବ ନାରାୟଣ ସାମଲଙ୍କୁ ଜଣେ ଅଗ୍ରଣୀ ଓ ସଫଳ ଚାଷୀ ଭାବେ ପୁରସ୍କୃତ କରାଯାଇଛି। ଏହି ଉପଲକ୍ଷେ ନୂଆଦିଲ୍ଲୀ ଠାରେ ଆୟୋଜିତ କାର୍ଯ୍ୟକ୍ରମରେ ଭାରତ ସରକାରଙ୍କ ପକ୍ଷରୁ କେନ୍ଦ୍ର କୃଷି ଓ କୃଷକ କଲ୍ୟାଣ ମନ୍ତ୍ରୀ ଜୈକାଶ ଚୌଧୁରୀଙ୍କ ଠାରୁ ସେ ଏହି ପୁରସ୍କାର ଗ୍ରହଣ କରିଛନ୍ତି। କଟକ ଜିଦ୍ୟାଧରପୁର ସ୍ଥିତ କେନ୍ଦ୍ରୀୟ ଧାନ ଗବେଷଣା କେନ୍ଦ୍ର ଦ୍ୱାରା ପ୍ରଦତ୍ତ "ଫାର୍ମର୍ ଫାଷ୍ଟ' ପ୍ରୋଜେକ୍ଟ ମାଧ୍ୟମରେ ବୈଜ୍ଞାନିକ ପଦ୍ଧତିରେ ଉନ୍ନତମାନର ଧାନ ଓ ପରିବା ଚାଷ ଜରୁଥିବା ଚାଷୀମାନଙ୍କୁ ଏଥିରେ ସାମିଲ କରାଯାଇଥିଲା। ଏଥିରେ ଶ୍ରୀ ସାମଲ ଉଲ୍ଲେଖନୀୟ ସଫଳତା ପଦର୍ଶନ କରିବା ପରେ ଧାନ ଗବେଷଣା କେନ୍ଦ୍ର ପକ୍ଷରୁ ତାଙ୍କୁ ଶ୍ରେଷ୍ଠ ଚାଷୀଭାବେ ବିବେଚିତ କରାଯିବା ସହ ପୁରସ୍କାର ପାଇଁ ତାଙ୍କ ନାଁ ସୁପାରିଶ କରାଯାଇଥିଲା।

ଏନ୍‌ଆର୍‌ଆର୍‌ଆଇରେ ଆନ୍ତର୍ଜାତିକ ପୋଷକ ଶସ୍ୟ ବର୍ଷ ୨୦୨୩ ପାଇଁ କାର୍ଯ୍ୟକ୍ରମ

କଟକ ସଦର, (ପିପିଏସ୍) : ଭାରତ ସରକାରଙ୍କ କୃଷି ଓ କୃଷକ କଲ୍ୟାଣ ମନ୍ତ୍ରଣାଳୟ ପକ୍ଷରୁ କଟକ ଜାତୀୟ ଧାନ ଗବେଷଣା ଅନୁଷ୍ଠାନ (ଏନ୍ ଆର ଆର୍ ଆଇ)ଠାରେ ଆନ୍ତର୍ଜାତୀୟ ମିଲେଟ୍ ବର୍ଷ ୨୦୨୩ ପରିପ୍ରେକ୍ଷୀରେ 'ପୋଷଣ ବଗିଚା ଏବଂ ବୃକ୍ଷ ରୋପଣର ମହାଅଭିଯାନ' ଅନୁଷ୍ଠିତ ହୋଇଯାଇଛି। ଭାରତର ମାଣ୍ଡିଆ ଜାତୀୟ ଫସଲର ଚାଷୀ ଭାଇମାନେ କିପରି ଆନ୍ତର୍ଜାତୀୟ ସ୍ତରରେ ଖ୍ୟାତିସମ୍ପର୍ଣ୍ଣ ସହିତ ଅଗ୍ରସର ହେବେ ଏବଂ ମାଣ୍ଡିଆ, ବାଜରା, ଯଅ, ପୋଷଣ ବଗିଚା ଇତ୍ୟାଦି ମାଧ୍ୟମରେ ଖାଦ୍ୟରେ ପୋଷକ ତତ୍ତ୍ୱ କିପରି ବୃଦ୍ଧି ଘଟିବ ସେ ସମ୍ପର୍କରେ ବିଶେଷ ଆଲୋଚନା କରାଯାଇଥିଲା। କାର୍ଯ୍ୟକ୍ରମରେ ଅନୁଷ୍ଠାନର ନିର୍ଦ୍ଦେଶକ ଡଃ ଦୀପଙ୍କର ମାଇତି ମୁଖ୍ୟ ଅତିଥି ଭାବେ ଯୋଗଦେଇ ମିଲେଟ୍ ଜାତୀୟ ଫସଲ ଉତ୍ପାଦନରେ ଭାରତ ହେଉଛି ସବୁଠୁ ଅଗ୍ରଣୀ ଦେଶ ଏବଂ ମିଲେଟ୍ ଜାତୀୟ ବିଭିନ୍ନ ଖାଦ୍ୟ ସାମଗ୍ରୀ ଦ୍ୱାରା ସମାଜରୁ କୁପୋଷଣ ଦୂର କରିବାରେ ଭାରତର ଅନ୍ତର୍ନିହିତ ଶକ୍ତି ରହିଛି ବୋଲି କହିଥିଲେ। ଏହି କାର୍ଯ୍ୟକ୍ରମରେ ଅନ୍ୟମାନଙ୍କ ମଧ୍ୟରେ ଜୀବ ରସାୟନ ବିଭାଗର ମୁଖ୍ୟ ଡଃ ପ୍ରଦ୍ମିନୀ ସ୍ୱାଇଁ, କ୍ୟାମ୍ପସ ବିକାଶ କମିଟିର ଅଧକ୍ଷ ଡଃ ଏମ୍. କେ. ବେଗ୍, ଡଃ ଭବାନୀ ଶଙ୍କର ଶତପଥୀ ପ୍ରମୁଖ ସମ୍ମାନିତ ଅତିଥି ଭାବେ ଯୋଗଦେଇ ପୁଷ୍ଟିକର ଖାଦ୍ୟ ଓ ବୃକ୍ଷରୋପଣର ମହତ୍ତ୍ୱ ସହିତ ମିଲେଟ୍ ଜାତୀୟ ଖାଦ୍ୟର ଗୁରୁତ୍ୱ ଉପରେ ଆଲୋକପାତ କରିଥିଲେ। ଏହି ଅବସରରେ ପନିପରିବା ମଞ୍ଜି, ଫଳ ଚାରା ଏବଂ ମାଣ୍ଡିଆ ଜାତୀୟ ଖାଦ୍ୟ ଉପସ୍ଥିତ ଚାଷୀ ଭାଇ ଭଉଣୀମାନଙ୍କୁ ବଣ୍ଟନ କରାଯାଇଥିଲା। ଶହେରୁ ଊର୍ଦ୍ଧ୍ୱ କୃଷିଜୀବୀ ମହିଳା ଓ କୃଷକ ଭାଇମାନେ କାର୍ଯ୍ୟକ୍ରମରେ ଯୋଗଦେଇଥିଲେ। ଅନୁଷ୍ଠାନ ପରିସରରେ ବୃକ୍ଷରୋପଣ କରାଯାଇଥିଲା। କାର୍ଯ୍ୟକ୍ରମ ପ୍ରାରମ୍ଭରେ କୃଷି ବୈଜ୍ଞାନିକ ଡଃ ସୁମନ୍ତ କୁମାର ମିଶ୍ର ସ୍ୱାଗତ ଭାଷଣ ଦେଇଥିବା ବେଳେ ଡଃ ବିଶ୍ୱଜିତ୍ ମଣ୍ଡଳ ଧନ୍ୟବାଦ ଅର୍ପଣ କରିଥିଲେ।

ଏନ୍‌ଆର୍‌ଆର୍‌ଆଇ ଉଦ୍ୟାନ କୃଷି ଉପରେ ତାଲିମ ଶିବିର

କଟକ ସଦର,ମାହାଙ୍ଗା(ନି.ପ୍ର): ଜାତୀୟ ଧାନ ଗବେଷଣା ଅନୁଷ୍ଠାନ (ଏନ୍‌ଆର୍‌ଆର୍‌ଆଇ) କଟକ ଦ୍ୱାରା ପରିଚାଳିତ ଫାର୍ମର ଫାଷ୍ଟ ପ୍ରକଳ୍ପ ଆନୁକୂଲ୍ୟରେ ଉନ୍ନତ ଜ୍ଞାନ କୌଶଳର ବ୍ୟବହାର ଦ୍ୱାରା ଉଦ୍ୟାନ କୃଷିରେ ଉତ୍ପାଦନ ଓ ଲାଭ ବୃଦ୍ଧି ଉପରେ ଏକ ପ୍ରଶିକ୍ଷଣ କାର୍ଯ୍ୟକ୍ରମ ଅନୁଷ୍ଠିତ ହୋଇଯାଇଛି। ଏହି ପ୍ରକଳ୍ପ ଦ୍ୱାରା କଟକ ଜିଲ୍ଲାର ୪ଟି ପୋଷ୍ୟ ଗ୍ରାମ ଯଥା ସତ୍ୟଭାମାପୁର, ବିଶ୍ୱନାଥପୁର, ଗଣେଶ୍ୱରପୁର ଓ ଲକ୍ଷ୍ମୀନାରାୟଣପୁର ଗ୍ରାମରୁ ୨୦୦ରୁ ଊର୍ଦ୍ଧ୍ୱ ଚାଷୀ ତାଲିମ ନେଇଥିଲେ। ଏଥିରେ ଅନୁଷ୍ଠାନର ପ୍ରଧାନ ବୈଜ୍ଞାନିକ ତଥା ପ୍ରକଳ୍ପର ମୁଖ୍ୟ ଡ. ସୁମନ୍ତ କୁମାର ମିଶ୍ର ୨୦୧୬ରୁ ଚାଲିଥିବା ଏହି ପ୍ରକଳ୍ପ ଆନୁକୂଲ୍ୟରେ ଉପରୋକ୍ତ ୪ଟି ପୋଷ୍ୟ ଗ୍ରାମର ୮ ଶହରୁ ଊର୍ଦ୍ଧ୍ୱ କୃଷି ପରିବାର କୃଷି ଓ ଆନୁଷଙ୍ଗିକ କାର୍ଯ୍ୟରେ ଉପକୃତ ହୋଇଛନ୍ତି ବୋଲି ସୂଚନା ଦେଇଥିଲେ। ଏହି ଶିବିରରେ କେନ୍ଦ୍ରୀୟ ଉଦ୍ୟାନ ଗବେଷଣା କେନ୍ଦ୍ର ଭୁବନେଶ୍ୱରର ମୁଖ୍ୟ ବୈଜ୍ଞାନିକ ଡ. ଗୋବିନ୍ଦ ଚନ୍ଦ୍ର ଆଚାର୍ଯ୍ୟ ଯୋଗଦେଇ ଉଦ୍ୟାନ କୃଷିରେ ସମନ୍ୱିତ ଫସଲ ପରିଚାଳନା ଉପରେ ଆଲୋକପାତ କରିଥିଲେ। ଏନ୍‌ଆର୍‌ଆର୍‌ଆଇର ବରିଷ୍ଠ ବୈଜ୍ଞାନିକ ଡ. ଭବାନୀ ଶଙ୍କର ଶତପଥୀ ପ୍ରାଣୀମାନଙ୍କ ଦ୍ୱାରା ଆହ୍ୱାନ କରାଯାଇଥିବା ଦେଶୀ ଗାଈ ଗୋବର ଏବଂ ଗୋ-ମୂତ୍ରର ମିଶ୍ରଣରୁ ପ୍ରସ୍ତୁତ ଜୀବାମୃତ, ଘନଜୀବାମୃତ ଆଦି ଜୈବିକ ମିଶ୍ରଣ କୃଷିରେ ଉତ୍ପାଦନ ଏବଂ ଉଦ୍ୟାନ କୃଷିରେ ଉପାଦେୟତା ପ୍ରସ୍ତୁତି ଏବଂ ବ୍ୟବହାର ଉପରେ ଆଲୋକପାତ କରିଥିଲେ। ଏହି ତାଲିମ କାର୍ଯ୍ୟକ୍ରମରେ କୃଷକ ଉଦ୍ଧବ ଚରଣ ପାଢ଼ୀ, ଶିବ ନାରାୟଣ ସାମଲ, ସଂଗ୍ରାମ କେଶରୀ ପାଣି, ଭୀମ ଚରଣ ଦାସ ପ୍ରମୁଖ ଯୋଗଦେଇଥିଲେ। କାର୍ଯ୍ୟକ୍ରମକୁ ପ୍ରକଳ୍ପର କର୍ମଚାରୀ କୃତ୍ତିବାସ ଜେନା, ଉମାକାନ୍ତ ପରିଡ଼ା, କୁମାରୀ ସୋନାଲୀ ସେଠୀ ଓ ବୈରାଗୀ ଚରଣ ଭୋଇ ପ୍ରମୁଖ ପରିଚାଳନା କରିଥିଲେ।

ସମ୍ଭାବ୍ୟ ମରୁଡ଼ି ପରିସ୍ଥିତିରେ ଖରିଫ ଧାନର ସୁପରିଚାଳନା ଉପରେ ତାଲିମ୍ ଶିବିର

କଟକ ସଦର (ପିପିଏସ୍): ଜାତୀୟ ଧାନ ଗବେଷଣା ଅନୁଷ୍ଠାନ (ଏନ୍‌ଆର୍‌ଆର୍‌ଆଇ) ପକ୍ଷରୁ ସମ୍ଭାବ୍ୟ ମରୁଡ଼ି ପରିସ୍ଥିତିରେ ଖରିଫ ଧାନର ସୁପରିଚାଳନା ଉପରେ ବୁଧବାର ତାଲିମ ଶିବିର ଅନୁଷ୍ଠିତ ହୋଇଯାଇଛି। ଖରିଫ ଧାନରେ ସମନ୍ୱିତ ଫସଲ ପରିଚାଳନା ପଦ୍ଧତି ଉପରେ କୌଶଳ ଭିତ୍ତିକ ପ୍ରଶିକ୍ଷଣ ତଥା କ୍ଷେତ୍ର ପ୍ରଦର୍ଶନୀ କାର୍ଯ୍ୟକ୍ରମ ଅନୁଷ୍ଠିତ ହୋଇଥିଲା। ଅନୁଷ୍ଠାନର ପ୍ରଧାନ ବୈଜ୍ଞାନିକ ତଥା ପ୍ରକଳ୍ପର ମୁଖ୍ୟ ଡଃ ସୁମନ୍ତ କୁମାର ମିଶ୍ର ଉପସ୍ଥିତ ଚାଷୀମାନଙ୍କୁ ସ୍ୱାଗତ କରିଥିଲେ। ଚଳିତବର୍ଷ ସ୍ୱଳ୍ପ ବୃଷ୍ଟିପାତ ଯୋଗୁ ରାଜ୍ୟର ୨୫ ଜିଲ୍ଲାରେ ମରୁଡ଼ି ପରିସ୍ଥିତି ସୃଷ୍ଟି ହୋଇଛି। ଏହାକୁ ଦୃଷ୍ଟିରେ ରଖି ବିଶେଷ ଫସଲ ପରିଚାଳନା ଉପରେ ଡଃ ମିଶ୍ର ଆଲୋକପାତ କରିଥିଲେ। ଅନୁଷ୍ଠାନର ଫସଲ ଉତ୍ପାଦନ ବିଭାଗର ବରିଷ୍ଠ ବୈଜ୍ଞାନିକ ଡଃ ଭବାନି ଶଙ୍କର ଶତପଥୀ ଖରିଫ ଧାନର ସୁପରିଚାଳନା ଉପରେ ବିଶେଷ ତାଲିମ ପ୍ରଦାନ କରିଥିଲେ। ଏତଦ୍‌ବ୍ୟତୀତ ଏନ୍‌ଆର୍‌ଆର୍‌ଆଇ ଦ୍ୱାରା ଉଦ୍ଭାବିତ ଲିଫ୍ କଲର ଚାର୍ଟ ଦ୍ୱାରା କିପରି ଯବକ୍ଷାରଜାନ ସାରର ମାତ୍ରାକୁ କମ୍ କରି ଉତ୍ପାଦନ ବଢ଼ାଯାଇ ପାରିବ ସେ ବିଷୟରେ ବୁଝାଇ ଥିଲେ ଓ ଘାସ ମରା ଯନ୍ତ୍ରର ବ୍ୟବହାର ସମ୍ପର୍କରେ କ୍ଷେତ୍ର ପ୍ରଦର୍ଶନୀ କରାଯାଇଥିଲା। ଏହି ପ୍ରକଳ୍ପ ଦ୍ୱାରା କଟକ ଜିଲ୍ଲାର ୪ଟି ପୋଷ୍ୟ ଗ୍ରାମ ଯଥା- ସତ୍ୟଭାମାପୁର, ବିଶ୍ୱନାଥପୁର, ଗଣେଶ୍ୱରପୁର ଓ ଲକ୍ଷ୍ମୀନାରାୟଣପୁରରୁ ୮୫ରୁ ଊର୍ଦ୍ଧ୍ୱ ଧାନ ଚାଷୀ ତାଲିମ ନେଇଥିଲେ। ଏହି କାର୍ଯ୍ୟକ୍ରମରେ ଅଗ୍ରଣୀ କୃଷକ ଶିବ ନାରାୟଣ ସାମଲ, ସଂଗ୍ରାମ କେଶରୀ ପାଣୀ, ଉଦ୍ଧବ ଚରଣ ପାଢ଼ୀ, ଭୀମ ଚରଣ ଦାସ, ବ୍ରଜବନ୍ଧୁ ସାମଲ ଓ ପରମାନନ୍ଦ ସାମଲ ପ୍ରମୁଖ ଯୋଗଦେଇଥିଲେ। କାର୍ଯ୍ୟକ୍ରମକୁ ପ୍ରକଳ୍ପର କର୍ମଚାରୀ ସୁଶ୍ରୀ ସାତୀପ୍ରଜ୍ଞା, ସୋନାଲୀ ସେଠୀ, କୃତୀବାସ ଜେନା, ଉମାକାନ୍ତ ପରିଡ଼ା, ବୈରାଗୀ ଚରଣ ଭୋଇ ପ୍ରମୁଖ ପରିଚାଳନା କରିଥିଲେ।

ବୈଜ୍ଞାନିକ ପରାମର୍ଶଦାତା କମିଟିର ଫାର୍ମର ଫାଷ୍ଟ ପ୍ରକଳ୍ପ ଅଞ୍ଚଳ ପରିଦର୍ଶନ

କଟକ ସଦର,୨୦।୧୦(ନି.ପ୍ର) : ଜାତୀୟ ଧାନ ଗବେଷଣା ଅନୁଷ୍ଠାନ ବୈଜ୍ଞାନିକ ପରାମର୍ଶଦାତା କମିଟିର ସଦସ୍ୟ ଡ. ଭି.ଭି. ସଦମାତେ ଅନୁଷ୍ଠାନ ଦ୍ୱାରା ପରିଚାଳିତ ଫାର୍ମର ଫାଷ୍ଟ ପ୍ରକଳ୍ପ ଅଞ୍ଚଳରେ ଗସ୍ତ ପରିଦର୍ଶନ କରିଛନ୍ତି। ୨୦୧୬ରୁ ଚାଲିଥିବା ଏହି ପ୍ରକଳ୍ପ ଆନୁକୂଲ୍ୟରେ ଜିଲ୍ଲାର ୪ଟି ପୋଷ୍ୟ ଗ୍ରାମ ବିଶ୍ୱନାଥପୁର, ସତ୍ୟଭାମାପୁର, ଲକ୍ଷ୍ମୀନାରାୟଣପୁର ଓ ଗଣେଶ୍ୱରପୁରର ୧ ହଜାର ୫ ଶହରୁ କୃଷି ପରିବାରକୁ କୃଷି ଓ ଆନୁଷଙ୍ଗିକ କ୍ଷେତ୍ରରେ ସହାୟତା ଦିଆଯାଇଛି। ଧାନ, ମୁଗ, ବିରି ଓ ପନିପରିବା ବିହନ, ଫଳ ଚାରା, ସାର, ଔଷଧ, କୃଷି ଯନ୍ତ୍ରପାତି, କୁକୁଡ଼ା ଓ ବତକ ଛୁଆ, ମାଛ ଯାଆଁଳ, ଗାଈ ଓ ଛେଳିଙ୍କ ପାଇଁ ମିନେରାଲ ମିକ୍ସଚର, ମହୁ ବାକ୍ସ, ଛତୁ ମଞ୍ଜି ଓ ଜିଆ ଖତ ଉପକରଣ ଇତ୍ୟାଦି ମାଗଣାରେ ଦିଆଯିବା ସହିତ ତାଲିମ ମଧ୍ୟ ପ୍ରଦାନ କରାଯାଇଛି। ଡ. ସଦମାତେ ପ୍ରକଳ୍ପ ଦ୍ୱାରା ପରିଚାଳିତ ବାସ୍ତୁ କୃଷକ ଉଦ୍ୟାନ କରି ଉପକୃତ କୃଷକ ଓ କୃଷିଜୀବୀ ମହିଳାଙ୍କ ସହିତ କଥାବାର୍ତ୍ତା କରିଥିଲେ। ଅନ୍ୟମାନଙ୍କ ମଧ୍ୟରେ ଅନୁଷ୍ଠାନର ନିର୍ଦ୍ଦେଶକ ଡ. ଅମରେଶ କୁମାର ନାୟକ, ସମାଜ ବିଜ୍ଞାନ ବିଭାଗର ମୁଖ୍ୟ ଡ. ଜି.ଏ.କେ. କୁମାର, ପ୍ରକଳ୍ପର ମୁଖ୍ୟ ଡ. ସୁମନ୍ତକୁମାର ମିଶ୍ର, ବରିଷ୍ଠ ବୈଜ୍ଞାନିକ ଡ. ଭବାନୀ ଶଙ୍କର ଶତପଥୀ ଓ ସ୍ଥାନୀୟ କୃଷି ଅଧିକାରୀ ବିଦ୍ୟାଶ୍ରୀ ତ୍ରିପାଠୀ ଗସ୍ତ ପରିଦର୍ଶନ ସମୟରେ ଉପସ୍ଥିତ ଥିଲେ। ଏହି ଅବସରରେ ଆୟୋଜିତ କୃଷକମାନଙ୍କ ସଭାରେ କୃଷିକାର୍ଯ୍ୟ ଦ୍ରବ୍ୟର ଉପଯୁକ୍ତ ବଜାର, କୃଷକ ଉତ୍ପାଦକ ଗୋଷ୍ଠୀ ମାଧ୍ୟମରେ ସଙ୍ଗଠିତକରଣ, ମହିଳାମାନଙ୍କ ପାଇଁ ଉପଯୁକ୍ତ ଜ୍ଞାନ କୌଶଳର ପ୍ରୟୋଗ ଓ ପ୍ରକଳ୍ପକୁ ସରକାରଙ୍କର ବିଭିନ୍ନ ଯୋଜନା ସହିତ ଯୋଡ଼ିବା ଉପରେ ଡ. ସଦମାତେ ଗୁରୁତ୍ୱାରୋପ କରିଥିଲେ। ଏହି କାର୍ଯ୍ୟକ୍ରମକୁ ପ୍ରକଳ୍ପର କର୍ମଚାରୀ ଓ ଅଗ୍ରଣୀ କୃଷକ ସଂଗ୍ରାମ କେଶରୀ ପାଣି, ଶିବ ନାରାୟଣ ସାମଲ, ସନ୍ଧ୍ୟାରାଣୀ ମଲ୍ଲିକ, ସୋନାଲୀ ସେଠୀ, ସୁଶ୍ରୀ ସାତୀ ପ୍ରଜ୍ଞା, ବୈରାଗୀ ଚରଣ ଭୋଇ ପ୍ରମୁଖ ପରିଚାଳନା କରିଥିଲେ। ପ୍ରକଳ୍ପର ମୁଖ୍ୟ ଡ. ସୁମନ୍ତ କୁମାର ମିଶ୍ର ସ୍ୱାଗତ ଭାଷଣ ଦେଇଥିବା ବେଳେ ଡ. ଶତପଥୀ ଧନ୍ୟବାଦ ଅର୍ପଣ କରିଥିଲେ।

ଚାଷୀଙ୍କୁ ଆଲୋକ ଯନ୍ତା ପ୍ରଦାନ

ସାଲେପୁର, ୧୪।୮ (ନି.ପ୍ର.): ସତ୍ୟଭାମାପୁର ଗ୍ରାମରେ ଜାତୀୟ ଧାନ ଗବେଷଣା କେନ୍ଦ୍ର ପକ୍ଷରୁ ପରିଚାଳିତ ଫାର୍ମର ଫାଷ୍ଟ ପ୍ରକଳ୍ପ ଆନୁକୂଲ୍ୟରେ ଆଲୋକ ଯନ୍ତା ଦ୍ୱାରା ଧାନ ଫସଲରେ ହାନିକାରକ ପୋକ ନିୟନ୍ତ୍ରଣ ଉପରେ ଏକ ପ୍ରଶିକ୍ଷଣ କାର୍ଯ୍ୟକ୍ରମ ଅନୁଷ୍ଠିତ ହୋଇଯାଇଛି। ଅନୁଷ୍ଠାନର ପ୍ରଧାନ ବୈଜ୍ଞାନିକ ଡ. ସୁମନ୍ତ କୁମାର ମିଶ୍ର, ଯନ୍ତାର ଉଦ୍ଭାବକ ଡ. ଶ୍ୟାମରଞ୍ଜନ ଦାସମହାପାତ୍ର ଯୋଗଦେଇ ଆଲୋକ ଯନ୍ତାର ବ୍ୟବହାର ଉପରେ ଚାଷୀମାନଙ୍କୁ ତାଲିମ ଦେଇଥିଲେ। ୨୦ଜଣ ଚାଷୀଙ୍କୁ ଏହା ପ୍ରଦାନ କରାଯାଇଥିଲା। ସତ୍ୟଭାମାପୁର, ଗଣେଶ୍ୱରପୁର, ବିଶ୍ୱନାଥପୁର, ଲକ୍ଷ୍ମୀନାରାୟଣପୁରର ଚାଷୀମାନେ ଏହି କାର୍ଯ୍ୟକ୍ରମରେ ଭାଗ ନେଇଥିଲେ। ସ୍ଥାନୀୟ ଅଞ୍ଚଳର ଚାଷୀ ଶିବନାରାୟଣ ସାମଲ, ସଂଗ୍ରାମ କେଶରୀ ପାଣି, ଭୀମଚରଣ ଦାଶ, ରାମଚନ୍ଦ୍ର ପାଣି ପ୍ରମୁଖ ଉପସ୍ଥିତ ଥିଲେ।

ଖରିଫ ଧାନ ଚାଷର କୌଶଳଭିତ୍ତିକ ପ୍ରଶିକ୍ଷଣ

ସାଲେପୁର, ୨୩।୮ (ନି.ପ୍ର): ସତ୍ୟଭାମାପୁର କସ୍ତୁରବା ଗାନ୍ଧୀ ଟ୍ରଷ୍ଟ ପରିସରରେ ଜାତୀୟ ଧାନ ଗବେଷଣା କେନ୍ଦ୍ର ପକ୍ଷରୁ ଫାର୍ମର ଫାଷ୍ଟ ପ୍ରକଳ୍ପ ଆନୁକୂଲ୍ୟରେ ଖରିଫ୍ ଧାନରେ ସମନ୍ୱିତ ଫସଲ ପରିଚାଳନା ଉପରେ କୌଶଳଭିତ୍ତିକ ପ୍ରଶିକ୍ଷଣ କାର୍ଯ୍ୟକ୍ରମ ଅନୁଷ୍ଠିତ ହୋଇଯାଇଛି। ଅନୁଷ୍ଠାନର ପ୍ରଧାନ ବୈଜ୍ଞାନିକ ଡ. ସୁମନ୍ତ କୁମାର ମିଶ୍ର, ଡ. ଭବାନୀଶଙ୍କର ଶତପଥୀ ଯୋଗଦେଇ ଖରିଫ ଧାନ ଫସଲର ବିହନ ବିଶୋଧନଠାରୁ ଶସ୍ୟ ଅମଳ ପର୍ଯ୍ୟନ୍ତ ସମସ୍ତ ତଥ୍ୟ ପ୍ରଦାନ କରିଥିଲେ। ସତ୍ୟଭାମାପୁର, ଗଣେଶ୍ୱରପୁର, ବିଶ୍ୱନାଥପୁର, ଲକ୍ଷ୍ମୀନାରାୟଣପୁର ପ୍ରଭୃତି ଗ୍ରାମରୁ ୫୦ରୁ ଊର୍ଦ୍ଧ୍ୱ ଚାଷୀ ଯୋଗ ଦେଇଥିଲେ। ପ୍ରଶ୍ନ ଉତ୍ତର କାର୍ଯ୍ୟକ୍ରମରେ ଚାଷୀ ଶିବନାରାୟଣ ସାମଲ, ବ୍ରଜବନ୍ଧୁ ସାମଲ, ସଂଗ୍ରାମ ପାଣି, ଉଦ୍ଧବ ଚରଣ ପାଢ଼ୀ, ରାମଚନ୍ଦ୍ର ପାଣିଙ୍କ ସମେତ ଅନେକ ଚାଷୀ ଭାଗ ନେଇଥିଲେ।

ଧାନରେ ସମନ୍ୱିତ ରୋଗପୋକ ପରିଚାଳନା ତାଲିମ

କଟକ, (ସବ୍ୟୁ): ଜାତୀୟ ଧାନ ଗବେଷଣା ଅନୁଷ୍ଠାନ (ଏନ୍.ଆର୍.ଆର୍.ଆଇ), କଟକ ଦ୍ୱାରା ପରିଚାଳିତ ଫାର୍ମର ଫାଷ୍ଟ ପ୍ରକଳ୍ପ ଆନୁକୂଲ୍ୟରେ ଧାନ ଫସଲରେ ସମନ୍ୱିତ ରୋଗ ଓ ପୋକ ପରିଚାଳନା ସମ୍ବନ୍ଧିତ କୌଶଳ ପ୍ରଶିକ୍ଷଣ କାର୍ଯ୍ୟକ୍ରମ କଟକ ଜିଲ୍ଲା ସାଲେପୁର ବ୍ଲକର ସତ୍ୟଭାମାପୁର ଗ୍ରାମରେ ଅନୁଷ୍ଠିତ ହୋଇଯାଇଛି। ଏଥିରେ ପ୍ରକଳ୍ପ ଦ୍ୱାରା ଚାରୋଟି ପୋଷ୍ୟଗ୍ରାମ ଯଥା ସତ୍ୟଭାମାପୁର, ବିଶ୍ୱନାଥପୁର, ଗଣେଶ୍ୱରପୁର ଓ ଲକ୍ଷ୍ମୀନାରାୟଣପୁର ରୁ ୯୦ ରୁ ଊର୍ଦ୍ଧ୍ୱ ଧାନ ଚାଷୀ ତାଲିମ ନେଇଥିଲେ। ଅନୁଷ୍ଠାନର ପ୍ରଧାନ ବୈଜ୍ଞାନିକ ତଥା ପ୍ରକଳ୍ପର ମୁଖ୍ୟ ଡଃ ସୁମନ୍ତ କୁମାର ମିଶ୍ର ସମସ୍ତଙ୍କୁ ସ୍ୱାଗତ କରିବା ସହିତ ରୋଗପୋକ ଦମନ କରିବା ପାଇଁ କୀଟନାଶକ ପ୍ରୟୋଗକୁ କମ୍ କରି କିପରି ଦମନ କରାଯାଇ ପାରିବ ତାହା ଉପରେ ସେ ଗୁରୁତ୍ୱାରୋପ କରିଥିଲେ। ଏନ୍.ଆର୍.ଆର୍.ଆଇ ଦ୍ୱାରା ଉଦ୍ଭାବିତ ପତ୍ର ରଙ୍ଗ ଚାର୍ଟ ଦ୍ୱାରା କିପରି ଯବକ୍ଷାରଜାନ ସାରର ମାତ୍ରାକୁ କମ୍ କରି ଉତ୍ପାଦନ ବଢ଼ାଯାଇପାରିବ ପ୍ରଦର୍ଶନୀ ମାଧ୍ୟମରେ ସମସ୍ତଙ୍କ ବୁଝାଇଥିଲେ। ଏହି କାର୍ଯ୍ୟକ୍ରମରେ ସଂସ୍ଥାଦ୍ୱାରା ବିକଶିତ ରାଇସ୍ ଏକ୍ସପର୍ଟ ମୋବାଇଲ ଆପକୁ ବ୍ୟବହାର କରି ଚାଷୀଭାଇମାନେ କିପରି ନିଜ ସମସ୍ୟାର ସମାଧାନ ପାଇ ପାରିବେ ତାହା ମଧ୍ୟ ଜଣାଇଥିଲେ। ରାସାୟନିକ ସାର ପରିବର୍ତ୍ତେ ଜୈବିକସାର ବ୍ୟବହାର ଉପରେ ସେ ଅଧିକ ଗୁରୁତ୍ୱ ଦେଇଥିଲେ। ଏହାପରେ ଅନୁଷ୍ଠାନର କୀଟତତ୍ତ୍ୱ ବିଭାଗର ପ୍ରଧାନ ବୈଜ୍ଞାନିକ ତଥା ଆଲୋକ ଯନ୍ତାର ଉଦ୍ଭାବକ ଡଃ ଶ୍ୟାମରଂଜନ ଦାସ ମହାପାତ୍ର କ୍ଷେତ୍ର ପ୍ରଦର୍ଶନ ମାଧ୍ୟମରେ ଆଲୋକ ଯନ୍ତାର ବ୍ୟବହାର ଉପରେ ତାଲିମ ଦେଇଥିଲେ। ଏହା ପରେ ଅନୁଷ୍ଠାନର ଫସଲ ସଂରକ୍ଷଣ ବିଭାଗର ପ୍ରଧାନ ବୈଜ୍ଞାନିକ ଡଃ ଶ୍ରୀକାନ୍ତ ଲେଙ୍କା କହିଥିଲେ ଯେ ଧାନ ଫସଲରେ ମହିଷା ରୋଗ, ବାଦାମି ପତ୍ରଚିତା ରୋଗ, ପତ୍ରାଚ୍ଛଦପୋଡା ରୋଗ, ପତ୍ରପୋଡା ରୋଗ, ମୂଳସଢ଼ା, ପତ୍ରାଚ୍ଛଦ ସଢ଼ା ରୋଗ ଧାନ ଫସଲରେ ଅନେକ କ୍ଷତି କରନ୍ତି ଏବଂ ଧାନ ଉତ୍ପାଦନ କମିବା ସହିତ ଧାନର ଗୁଣବତ୍ତା ମଧ୍ୟ ନଷ୍ଟ ହୋଇଥାଏ। ସମନ୍ୱିତ ପ୍ରଣାଳୀ ଅବଲମ୍ବନ କରି କିପରି ଧାନ ଫସଲକୁ ରକ୍ଷା କରାଯାଇପାରିବ ତା ଉପରେ ଆଲୋକପାତ କରିଥିଲେ। ଏହି ତାଲିମ କାର୍ଯ୍ୟକ୍ରମରେ ଅଗ୍ରଣୀ କୃଷକ ସର୍ବଶ୍ରୀ ଶିବନାରାୟଣ ସାମଲ, ସଂଗ୍ରାମ କେଶରୀ ପାଣି, ଉଦ୍ଧବ ଚରଣ ପାଢ଼ୀ, ଭୀମ ଚରଣ ଦାସ, ବାସୁଦେବ ରାଉତ୍, ବ୍ରଜବନ୍ଧୁ ସାମଲ, ପରମାନନ୍ଦ ସାମଲ ଓ ପୂର୍ଣ୍ଣଚନ୍ଦ୍ର ବେହେରା ପ୍ରମୁଖ ଯୋଗ ଦେଇଥିଲେ। ଏହି କାର୍ଯ୍ୟକ୍ରମକୁ ପ୍ରକଳ୍ପ କର୍ମଚାରୀ ଯଥା ସୁଶ୍ରୀ ସ୍ୱାତୀ ପ୍ରଜ୍ଞା, ସୁଶ୍ରୀ ସୋନାଲି ସେଠୀ, କୃତ୍ତିବାସ ଜେନା ଓ ଶ୍ରୀ ଉମାକାନ୍ତ ପରିଡ଼ା ପ୍ରମୁଖ ପରିଚାଳନା କରିଥିଲେ।

...ାର୍ପିତ ଖରିଫ ଧାନ ସୁପରିଚାଳନା ତାଲିମ ଶିବିର

...ଟକ ସଦର, ୨୫।୮ (ନି.ପ୍ର) : ଜାତୀୟ ଧାନ ଗବେଷଣା ଅନୁଷ୍ଠାନ (ଏନ୍‌ଆର୍‌ଆରଆଇ) ପକ୍ଷରୁ ସମ୍ଭାବ୍ୟ ମରୁଡ଼ି ପରିସ୍ଥିତିରେ ଖରିଫ ଧାନର ସୁପରିଚାଳନା ଉପରେ ଏକ ତାଲିମ ଶିବିର ଅନୁଷ୍ଠିତ ହୋଇଯାଇଛି । ବୈଜ୍ଞାନିକ ଡଃ ସୁମନ୍ତ କୁମାର ମିଶ୍ର ଉପସ୍ଥିତ ଚାଷୀଙ୍କୁ ସ୍ୱାଗତ କରିଥିଲେ। ୨୫ ଡିସାରେ ମରୁଡ଼ି ପରିସ୍ଥିତିକୁ ଦୃଷ୍ଟିରେ ରଖି ଫସଲ ପରିଚାଳନା ଉପରେ ଡଃ ମିଶ୍ର ଆଲୋକପାତ କରିଥିଲେ। ବୈଜ୍ଞାନିକ ଡଃ ଭବାନୀଶଙ୍କର ଶତପଥୀ ଖରିଫ ଧାନର ସୁପରିଚାଳନା ଉପରେ ତାଲିମ ପ୍ରଦାନ କରିଥିଲେ। ସତ୍ୟଭାମାପୁର, ବିଶ୍ୱନାଥପୁର, ଗଣେଶ୍ୱରପୁର ଓ ଲକ୍ଷ୍ମୀନାରାୟଣପୁରସ୍ଥ ୮୦ରୁ ଊର୍ଦ୍ଧ୍ୱ ଚାଷୀ ତାଲିମ ନେଇଥିଲେ। କାର୍ଯ୍ୟକ୍ରମରେ ଶିବ ନାରାୟଣ ସାମଲ, ସଂଗ୍ରାମ ଜେଶରା ପାଣି, ବ୍ରହ୍ମ ଚରଣ ପାଢ଼ୀ, ଭୀମ ଚରଣ ଦାସ ପ୍ରମୁଖ ଯୋଗ ଦେଇଥିଲେ। ସ୍ୱପ୍ନା ସ୍ୱାତୀସ୍ନିଗ୍ଧା, ସୋନାଲୀ ଗଣ୍ଡଠା, କୃତିବାସ ଜେନା, ଉମାକାନ୍ତ ପରିଡ଼ା ପ୍ରମୁଖ ପରିଚାଳନା କରିଥିଲେ।

କୃଷି ଉତ୍ପାଦନ ଉପରେ ପ୍ରଶିକ୍ଷଣ

ସାଲେପୁର, ୩।୧ (ନି.ପ୍ର): ବିଶ୍ୱନାଥପୁରସ୍ଥିତ ବିଶ୍ୱନାଥ ମନ୍ଦିର ପରିସରରେ ଜାତୀୟ ଧାନ ଗବେଷଣା ଅନୁଷ୍ଠାନ କଟକ ପକ୍ଷରୁ ଉନ୍ନତ ଜ୍ଞାନକୌଶଳ ବ୍ୟବହାର ଦ୍ୱାରା ଉଦ୍ୟାନ କୃଷିରେ ଉତ୍ପାଦନ ଓ ଲାଭ ବୃଦ୍ଧି ଉପରେ ପ୍ରଶିକ୍ଷଣ ଅନୁଷ୍ଠିତ ହୋଇଯାଇଛି । ଅନୁଷ୍ଠାନର ପ୍ରଧାନ ବୈଜ୍ଞାନିକ ଡଃ ସୁମନ୍ତ କୁମାର ମିଶ୍ର, ଡଃ ଗୋବିନ୍ଦ ଆଚାର୍ଯ୍ୟ, ଡଃ ଭବାନୀଶଙ୍କର ଶତପଥୀ ପ୍ରମୁଖ ଜ୍ଞାନକୌଶଳ ଉପରେ ଆଲୋଚନା କରିଥିଲେ । ଏହି କାର୍ଯ୍ୟକ୍ରମରେ ଗଣେଶ୍ୱରପୁର, ସତ୍ୟଭାମାପୁର, ଲକ୍ଷ୍ମୀନାରାୟଣପୁର, ବିଶ୍ୱନାଥପୁରର ୬୦ରୁ ଊର୍ଦ୍ଧ୍ୱ ଚାଷୀ ଯୋଗ ଦେଇଥିଲେ । ଉଦ୍ଧବ ଚରଣ ପାଢ଼ୀ, ଶିବ ନାରାୟଣ ସାମଲ, ରାମଚନ୍ଦ୍ର ପାଣି, ଭୀମଚରଣ ଦାସ, ସଂଗ୍ରାମ କେଶରୀ ପାଣିଙ୍କ ସମେତ ବହୁ ଗ୍ରାମବାସୀ ଯୋଗ ଦେଇଥିଲେ ।

ଚାଷୀଙ୍କୁ ଛତୁ ଚାଷ ତାଲିମ

ସାଲେପୁର, ୨୭।୩ (ନି.ପ୍ର): ବିଶ୍ୱନାଥପୁର ଗ୍ରାମର ଅଙ୍ଗନବାଡ଼ି କେନ୍ଦ୍ର ନିକଟରେ ଜାତୀୟ ଧାନ ଗବେଷଣା କେନ୍ଦ୍ର କଟକ ପକ୍ଷରୁ ଫାର୍ମର ଫାଷ୍ଟ ପ୍ରକଳ୍ପ ଆନୁକୂଲ୍ୟରେ ବ୍ୟବସାୟଭିତ୍ତିକ ଛତୁଚାଷ ସମ୍ପର୍କରେ ତାଲିମ କାର୍ଯ୍ୟକ୍ରମ ଅନୁଷ୍ଠିତ ହୋଇଯାଇଛି । ଏହି କାର୍ଯ୍ୟକ୍ରମରେ ଅନୁଷ୍ଠାନର ପ୍ରଧାନ ବୈଜ୍ଞାନିକ ଡଃ ସୁମନ୍ତ କୁମାର ମିଶ୍ର, ଡଃ ସୁକାନ୍ତ ଲେଙ୍କା, କୃତିବାସ ଜେନା, ସ୍ୱାତୀପ୍ରଜ୍ଞା ପ୍ରମୁଖ ତାଲିମ ଦେବା ସହ ଛତୁ ମଞ୍ଜି ବଣ୍ଟନ କରିଥିଲେ । ଏହି କାର୍ଯ୍ୟକ୍ରମରେ ଶିବନାରାୟଣ ସାମଲ, ଭୀମଚରଣ ଦାଶ, ସଂଗ୍ରାମ ପାଣି, ମମତା ବିଶ୍ୱାଳ, ରାମଚନ୍ଦ୍ର ପାଣିଙ୍କ ସମେତ ଗ୍ରାମର ୮୦ରୁ ଊର୍ଦ୍ଧ୍ୱ ଚାଷୀ ଯୋଗ ଦେଇଥିଲେ ।

ଜାତୀୟ ଧାନ ଗବେଷଣା କେନ୍ଦ୍ରରେ ବିଶ୍ୱ ତାଲି ଦିବସ

...ଟକସ୍ଥ(ନି.ପ୍ର) : ଜାତୀୟ ଧାନ ଗବେଷଣା ଅନୁଷ୍ଠାନ (ଏନ୍‌ଆର୍‌ଆରଆଇ) ପକ୍ଷରୁ ଆଜି ବିଶ୍ୱ ତାଲି ଦିବସ ପାଳନ କରାଯାଇଛି । ଏହି କାର୍ଯ୍ୟକ୍ରମର ମୁଖ୍ୟ ଅତିଥି ଜନ୍ତୁନା ମହାପାତ୍ର ଉଦ୍‌ଘାଟନ କରିବା ସହିତ ମଣିଷ ଓ ପଶୁମାନଙ୍କ ପାଇଁ ପୁଷ୍ଟି ସାରର ଆବଶ୍ୟକତା ସମ୍ପର୍କରେ ସୂଚନା ଦେଇଥିଲେ। ଅନୁଷ୍ଠାନର ନିର୍ଦ୍ଦେଶକ ଡ. ଚନ୍ଦ୍ରିମା ପାଇଁ ଖାଦ୍ୟ ନିରାପରା, ପୁଷ୍ଟିକର ମୂଲ୍ୟ ଏବଂ ପରିବେଶ ଉପକାରିତା ଦୃଷ୍ଟିରୁ ତାଲି ଜାତୀୟ ଶସ୍ୟ ଅତ୍ୟନ୍ତ ଗୁରୁତ୍ୱପୂର୍ଣ୍ଣ ଫସଲ ଅଟେ। ଜଳବାୟୁ ପରିବର୍ତ୍ତନ ହ୍ରାସ କରିବାରେ ଏହି ଫସଲଗୁଡ଼ିକ ମଧ୍ୟ ଅତ୍ୟନ୍ତ ଉପଯୋଗୀ ବୋଲି କହିଥିଲେ। ବ୍ୟକ୍ତିଗତ ବ୍ୟବହାର ପାଇଁ, ଅତିରିକ୍ତ ବିକ୍ରୟ ରଜେଞ୍ଜରେ ବୈଜ୍ଞାନିକ ରାପାୟରେ ତାଲି ଚାଷ କରିବାକୁ ସେ ଉପସ୍ଥିତ କୃଷକ ଏବଂ ମହିଳା ଚାଷୀଙ୍କୁ ପରାମର୍ଶ ଦେଇଥିଲେ। ଏହି କାର୍ଯ୍ୟକ୍ରମରେ ଫସଲ ଉନ୍ନୟନ ବିଭାଗର ମୁଖ୍ୟ ଡ. ଭାସ୍କର ଚନ୍ଦ୍ର ପାତ୍ର ଓ ଡ. ବି.ଏ.କେ. କୁମାର ସମାବେଶକୁ ସମ୍ବୋଧିତ କରିଥିଲେ। ଅନୁଷ୍ଠାନର ବରିଷ୍ଠ ବୈଜ୍ଞାନିକ ଡ. ଭବାନୀ ଶଙ୍କର ଶତପଥୀ, ଡ. ଏସ୍.ଡି. ମହାପାତ୍ର, ଡ. ଶତଶଙ୍କର ପ୍ରମୁଖ ତାଲି ଉପରେ ବକ୍ତବ୍ୟ ପ୍ରଦାନ କରିଥିଲେ। ଏହି ଅବସରରେ ବିଭିନ୍ନ ତାଲି ମଞ୍ଜି, ଖାଦ୍ୟ ପଦାର୍ଥ ଏବଂ ବାୟୋ ସାର ଉପରେ ଏକ ପ୍ରଦର୍ଶନୀ ଅନୁଷ୍ଠିତ ହୋଇଥିଲା । ପ୍ରାରମ୍ଭରେ କାର୍ଯ୍ୟକ୍ରମର ଆବାହକ ଡ. ସୁମନ୍ତ କୁମାର ମିଶ୍ର ସ୍ୱାଗତ ଭାଷଣ ପ୍ରଦାନ କରିଥିଲେ । କୋଡ଼ାଇ ଅଫିସର ଡ.ବିଶ୍ୱଜିତ ମଣ୍ଡଳ ଧନ୍ୟବାଦ ଅର୍ପଣ କରିଥିଲେ ।

ମହିଳା ଚାଷୀଙ୍କୁ କୁକୁଡ଼ା ଚିଆଁ ବଣ୍ଟନ

ସାଲେପୁର, ୭।୬(ନି.ପ୍ର) : ସ୍ଥାନୀୟ ଗୋପୀନାଥପୁର ମାଲିହତା ଗ୍ରାମରେ କେନ୍ଦ୍ରୀୟ ଧାନଗବେଷଣା ଅନୁଷ୍ଠାନ କଟକ ପକ୍ଷରୁ ଫାର୍ମର ଫାଷ୍ଟ ପ୍ରକଳ୍ପର ମୁଖ୍ୟ ଡ. ବିଶ୍ୱଜିତ୍ ମଣ୍ଡଳଙ୍କ ତତ୍ତ୍ୱାବଧାନରେ ମହିଳା ଚାଷୀମାନଙ୍କୁ ମାଗଣାରେ କୁକୁଡ଼ା ଚିଆଁ ବଣ୍ଟନ କରାଯାଇଛି । ଏହି ଅବସରରେ ପ୍ରକଳ୍ପର କର୍ମକର୍ତ୍ତା କୃତିବାସ ଜେନା, ସୌମ୍ୟରଞ୍ଜନ ପ୍ରଧାନ, ଉମାକାନ୍ତ ପରିଡ଼ା ପ୍ରମୁଖ ଉପସ୍ଥିତ ରହିଥିବାବେଳେ ଏହି ଅବସରରେ ୪୦ରୁ ଅଧିକ ମହିଳା ଚାଷୀମାନେ ଏଠାରେ ଉପସ୍ଥିତ ରହି ଉନ୍ନତମାନର କୁକୁଡ଼ା ଚିଆଁ, ଡ୍ରିଙ୍କର, ଫ୍ରିଡର, କୁକୁଡ଼ା ଖାଦ୍ୟ, ଔଷଧ ଆଦି ଗ୍ରହଣ କରିଥିଲେ। ଗ୍ରାମର ଚତୁର୍ଭୁଜ ଭୂୟାଁ, ବଳରାମ ଜେନା କାର୍ଯ୍ୟକ୍ରମରେ ସହଯୋଗ କରିଥିଲେ।

ଫାର୍ମର ଫାଷ୍ଟ ପ୍ରକଳ୍ପ ଆନୁକୂଲ୍ୟରେ ଆଲୋଚନାଚକ୍ର

ସାଲେପୁର, ୯।୩ (ନି.ପ୍ର.): କଟକସ୍ଥିତ ଜାତୀୟ ଧାନ ଗବେଷଣା ଅନୁଷ୍ଠାନ ଦ୍ୱାରା ପରିଚାଳିତ ଫାର୍ମର ଫାଷ୍ଟ ପ୍ରକଳ୍ପ ଆନୁକୂଲ୍ୟରେ ବୈଜ୍ଞାନିକ ଏବଂ ଚାଷୀମାନଙ୍କ ମଧ୍ୟରେ ଦିନିକିଆ ଆଲୋଚନାଚକ୍ର ସତ୍ୟଭାମାପୁରସ୍ଥିତ କସ୍ତୁରବା ଗାନ୍ଧୀ ସ୍ମାରକନିଧି ଟ୍ରଷ୍ଟ ପରିସରରେ ଅନୁଷ୍ଠିତ ହୋଇଯାଇଛି । ଅନୁଷ୍ଠାନର ପ୍ରଧାନ ବୈଜ୍ଞାନିକ ଡଃ ସୁମନ୍ତ

କୁମାର ମିଶ୍ରଙ୍କ ସଭାପତିତ୍ୱରେ ଅନୁଷ୍ଠିତ କାର୍ଯ୍ୟକ୍ରମରେ ଜାତୀୟ ଧାନ ଗବେଷଣା କେନ୍ଦ୍ର ହାଇଦରାବାଦର ଡଃ ପି. ଭେଙ୍କଟେଶ, ପ୍ରଧାନ ବୈଜ୍ଞାନିକ ଡଃ ଏନ୍. ଶିବରାମନ, ଡଃ ବି. କଲ୍ୟାଣୀ ପ୍ରମୁଖ ଆଲୋଚନାରେ ଅଂଶଗ୍ରହଣ କରିଥିଲେ । ଏଥିରେ କୃତିବାସ ଜେନା, ସ୍ୱାତୀପ୍ରଜ୍ଞା, ଟ୍ରଷ୍ଟ ପକ୍ଷରୁ ସନ୍ଧ୍ୟାରାଣୀ ମଲ୍ଲିକ, ଶିବନାରାୟଣ ସାମଲ, ବ୍ରଜବନ୍ଧୁ ସାମଲ, ଭୀମଚରଣ ଦାସ, ସଂଘମିତ୍ରା ରାଉତ, ରାମଚନ୍ଦ୍ର ପାଣିଙ୍କ ସମେତ ବହୁ ଚାଷୀ ଯୋଗ ଦେଇଥିଲେ ।

ଚାଷୀଙ୍କୁ ଉନ୍ନତ ମାନର ଧାନବିହନ ଯୋଗାଣ

ସାଲେପୁର, ୮।୭ (ନି.ପ୍ର.): ଜାତୀୟ ଧାନଗବେଷଣା କେନ୍ଦ୍ର କଟକର ଫାର୍ମର ଫାଷ୍ଟ ପ୍ରଜନ୍ମ ପଖରୁ ଖରିଫ୍ ଧାନଚଷ ପାଇଁ ଗୋପୀନାଥପୁର, ଗଣେଶ୍ୱରପୁର, ଗନାପୁର, ମାଳିହତା ପ୍ରଭୃତି ଗ୍ରାମର ଶହେରୁ ଅଧିକ ଚାଷୀଙ୍କୁ ଉନ୍ନତମାନର

ବିହନ ଯୋଗାଇ ଦିଆଯାଇଛି। ବିହନ ମଧ୍ୟରେ ଅଧିକ ଅମଳକ୍ଷମ ସିଆର -୧୩, ଗରନ୍ତା, ସ୍ୱର୍ଣ୍ଣ ସବ୍-୧ ଓ ସିଆର -୯୫୧ ପ୍ରଦାନ କରାଯାଇଛି।

ଧାନ ଗବେଷଣା କେନ୍ଦ୍ର ପକ୍ଷରୁ ଆଲୋଚନା

ସାଲେପୁର, ୯।୪ (ନି.ପ୍ର.): ସତ୍ୟଭାମାପୁରସ୍ଥିତ କସ୍ତୁରବା ଗାନ୍ଧୀ ସ୍ନାତକୋତ୍ତର ଟ୍ରଷ୍ଟ ପରିସରରେ ଜାତୀୟ ଧାନ ଗବେଷଣା କେନ୍ଦ୍ର ଦ୍ୱାରା ପରିଚାଳିତ ଫାର୍ମର ଫାଷ୍ଟ ପ୍ରଜନ୍ମ ଆନୁକୂଲ୍ୟରେ ଗୃହପାଳିତ ପଶୁ ପକ୍ଷୀମାନଙ୍କର ପୁଷ୍ଟିହୀନତାର ଲକ୍ଷଣ ଓ ଏହାର ନିରାକରଣ, ଚିକିତ୍ସା ସମ୍ପର୍କରେ ଏକଦିବସୀୟ ତାଲିମ କାର୍ଯ୍ୟକ୍ରମ ଅନୁଷ୍ଠିତ ହୋଇଯାଇଛି। ପ୍ରଧାନ ବୈଜ୍ଞାନିକ ଡଃ ସୁମନ୍ତ କୁମାର ମିଶ୍ରଙ୍କ ସଭାପତିତ୍ୱରେ ଅନୁଷ୍ଠିତ ଏହି କାର୍ଯ୍ୟକ୍ରମରେ କେନ୍ଦ୍ରୀୟ ପଶୁ ଗବେଷଣା କେନ୍ଦ୍ର ଭୁବନେଶ୍ୱରର ଡଃ

ସୁନୀଲ ଚନ୍ଦ୍ର ଗିରି, ଡଃ ଲିପି ଦାଶ ଆଲୋଚନା କରିଥିଲେ। କାର୍ଯ୍ୟକ୍ରମରେ କସ୍ତୁରବା ଟ୍ରଷ୍ଟର ସନ୍ଧ୍ୟାରାଣୀ ମଲ୍ଲିକ, କୃତିବାସ ଢେନା, ଶିବନାରାୟଣ ସାମଲ, ରାମଚରଣ ଦାଶ, ସ୍ୱାତୀପୁଣ୍ଡା, ଉଦ୍ଧବ ପାଢ଼ୀ, ରାମଚନ୍ଦ୍ର ପାଣି, ସଂଗ୍ରାମ ପାଣିଙ୍କ ସମେତ ୪ଟି ଗ୍ରାମର ୮୦ରୁ ଅଧିକ ଚାଷୀ ଉପସ୍ଥିତ ରହିଥିଲେ।

ଗୋପୀନାଥପୁରରେ ଚାଷୀଙ୍କୁ ପ୍ରଶିକ୍ଷଣ

ସାଲେପୁର, ୧୦।୯ (ନି.ପ୍ର.): ସାଲେପୁର ବ୍ଲକ ଗୋପୀନାଥପୁର ଗ୍ରାମରେ ଭେଟ୍ରୀୟ ଧାନ ଗବେଷଣା ସଂସ୍ଥା କଟକ ପକ୍ଷରୁ ଫାର୍ମର ଫାଷ୍ଟ ପ୍ରଜନ୍ମ ଅଧ୍ୟୟନରେ ଏକଦିବସୀୟ ପ୍ରଶିକ୍ଷଣ କାର୍ଯ୍ୟକ୍ରମ ଅନୁଷ୍ଠିତ ହୋଇଯାଇଛି। ପ୍ରକଳ୍ପର ବୈଜ୍ଞାନିକମାନେ ଅଞ୍ଚଳ ପରିଦର୍ଶନ କରିବା ସହିତ ପନିପରିବା ଚାଷରେ ଲାଭଜନକ ଉପାୟ ଜାଣିଥିବା ରୋଗପୋକ ନିୟନ୍ତ୍ରଣ ଉପରେ ଆଲୋକପାତ କରିଥିଲେ। ପ୍ରକଳ୍ପ ପ୍ରିନ୍ସିପ୍ୟାଲ ଡଃ ବିଶ୍ୱଜିତ ମଣ୍ଡଳ ଉପସ୍ଥିତ ରହି ଚାଷୀମାନଙ୍କୁ ପ୍ରକଳ୍ପର ଯୋଜନା ସମ୍ପର୍କରେ ତଥ୍ୟ ପ୍ରଦାନ କରିଥିଲେ। ସିଏଚ୍‌ଇଏସ୍ ଭୁବନେଶ୍ୱରର ଉଦ୍ୟାନ କୃଷି ବିଭାଗର ମୁଖ୍ୟ ଡଃ ଗୋବିନ୍ଦ ଚନ୍ଦ୍ର ଆଚାର୍ଯ୍ୟ ଉନ୍ନତ ବିହନର ପଟ୍ଟ ଓ ପନିପରିବା ଚାଷ କରି ଭିଭଲି ଚାଷୀମାନେ ଲାଭାନ୍ୱିତ ହୋଇପାରିବେ ତାହା ଉପରେ ତଥ୍ୟ ପ୍ରଦାନ କରିଥିଲେ। ଅନ୍ୟମାନଙ୍କ ମଧ୍ୟରେ ବୈଜ୍ଞାନିକ ଡଃ ସତ୍ୟପ୍ରିୟ ସିଂହ, ପ୍ରକଳ୍ପର କର୍ମକର୍ତ୍ତା ସୌଭାଗ୍ୟ ଗଞ୍ଜନ ପ୍ରଧାନ, କୃଷିଦାସ ଢେନା, ଗ୍ରାମବାସୀଙ୍କ ପକ୍ଷରୁ ବଳରାମ ଢେନା, ଚନ୍ଦ୍ରମୁଲିଲ ଢେରେଣା, ବିମ୍ବାଧର ସାମଲ ପ୍ରମୁଖ ଉପସ୍ଥିତ ରହି ଏହି କାର୍ଯ୍ୟକ୍ରମ ପରିଚାଳନାରେ ସହଯୋଗ କରିଥିଲେ।

ଗୋପୀନାଥପୁରରେ ଚାଷ ପ୍ରସଙ୍ଗ ପ୍ରଶିକ୍ଷଣ

ସାଲେପୁର, ୧୨।୯ (ନି.ପ୍ର.) : ସ୍ଥାନୀୟ ଗୋପୀନାଥପୁରସ୍ଥିତ କୃଷକଙ୍କର ମଧ୍ୟରେ ଘାଟ ବିତରଣ ଜରିଆରେ ଧାନ ଉତ୍ପାଦନ ଅନୁଷ୍ଠାନ କରିବା ପାଇଁ ଫାର୍ମର ଫାଷ୍ଟ ପ୍ରଜନ୍ମ କାର୍ଯ୍ୟକ୍ରମରେ ବୁଧବାର ଦିନ ଏକଦିବସୀୟ ପ୍ରଶିକ୍ଷଣ କାର୍ଯ୍ୟକ୍ରମ ଅନୁଷ୍ଠିତ ହୋଇଛି। ଜାତୀୟ ଧାନ ଗବେଷଣା କେନ୍ଦ୍ରର ପ୍ରଧାନ ବୈଜ୍ଞାନିକ ଡ଼ ବିଶ୍ୱଜିତ୍ ମଣ୍ଡଳଙ୍କ ଅଧ୍ୟକ୍ଷତାରେ କାର୍ଯ୍ୟକ୍ରମରେ ବୈଜ୍ଞାନିକ ଡ଼ ଲେବିନ ଦତ୍ତ ଅତିଥି, ଡ଼ ଶୁଭଶ୍ରୀ ସେଠୀ ପ୍ରମୁଖ ଯୋଗଦେଇ ପରିପ୍ରେକ୍ଷୀରେ ଚାଷୀମାନଙ୍କ ଉଦ୍ଦେଶ୍ୟରେ ଉଦ୍ବୋଧନ ଦେଇଥିଲେ। ଏହି ଅବସରରେ ଅନୁଷ୍ଠାନର କର୍ମକର୍ତ୍ତା କୃତିବାସ ଢେନା, ପଞ୍ଚୀମଞ୍ଜରୀ ପ୍ରଧାନଙ୍କ ସମେତ ଗୋପୀନାଥପୁର, ଗଣପୁର ଓ ମାଳିହତା ଗ୍ରାମର ୫୦ରୁ ଉର୍ଦ୍ଧ୍ୱ ଚାଷୀ ଯୋଗଦେଇ ଆଲୋଚନାରେ ଭାଗ ନେଇଥିଲେ। ସେମାନେ ଉନ୍ନତ ବିହନର ଘଟ ଓ ପରିପରିବା ବଜାର ଚାହିଦା ଥିବା ଫସଲ ଉତ୍ପାଦନ ସମ୍ପର୍କରେ ଅଧିକ ଜାଣିବାକୁ ଇଚ୍ଛା ପ୍ରକାଶ କରିଥିଲେ।

III. Electronic Media (Youtube):

Channel: https://m.youtube.com/@krushitech2208 (Krushitech2208)

A list of video links showcasing the various interventions implemented under the Farmer FIRST Programme has been provided below.

a) https://youtu.be/RBsPPUNB-AU?si=PEaCiZd5T9l55Eaa

b) Problem associated in paddy straw mushroom cultivation and their solution: https://youtu.be/R0vnb6OfXxs?si=n5Z-N3X6lBKllJZG

c) Training programme on improved fruit and vegetable cultivation: https://youtu.be/B8bTEwVqvSQ?si=TPAvA6_xD3XsRv9J

d) Improved method of cultivation of pointed gourd: https://youtu.be/ib1JgfCUwok?si=9MKgZjotYM_Lhuzs

e) Black gram and green gram peeling from domestic rice mills: https://youtu.be/VnF9FDLdZvE?si=4as8QNdTavymEeZi

f) Scientific method of apiculture rearing:

https://youtu.be/41xqZS3sCWI?si=JI-n1vAxSYmiY2le

g) Procedure of harvesting of vermi-compost and vermiculture: https://youtu.be/BRHh4MQXbJ8?si=br_jEd1aeD49tfVe

h) Training programme on improved package of practices of paddy straw mushroom cultivation: https://youtu.be/VoJlYBH_9F4?si=W9jxZqr91ErV0BTw

i) Procedure of installation of portable vermi-bed: https://youtu.be/rw30g4Ni6Sc?si=rJW4gPsb0BxLBxot

j) Making of paneer and pulverizing of spices through enterprise based module: https://youtu.be/N5DdNY3_stc?si=-mK7LrIZK13v4pkF

k) Economic analysis of vermi-composting: https://youtu.be/xBZFizZybKg?si=0XM449p1fkk9jJ5_

l) Demonstration of drone technology in rice field: https://youtu.be/X8WMgR4eNk8?si=GwmYcZWub_lVxWPz

m) Commercial cultivation of mint: https://youtu.be/Ue_T9kPZCoE?si=-HdcEM9H5i6U-fpR

n) Grafting of vegetable and fruits: https://youtu.be/kCjA1zt3wVg?si=NS-1q28OIuuw1Ejx

Awards and recognition:

Since 2017, the programme has recognized 30 progressive and innovative farmers and farm women for their exemplary contributions to agricultural development. These awardees have successfully adopted advanced, science-led farming technologies, resulting in substantial enhancement of farm income and livelihood security in rural areas. The honours include prestigious recognitions such as the IARI Innovative Farmer Award and the NRRI Innovative Farmer Award. Notably, women farmers have emerged as key change agents, playing a decisive role in technology adoption, farm-level decision-making, and enterprise diversification. Their active engagement, under the technical guidance of ICAR-CRRI, Cuttack, has significantly contributed to improved productivity, income augmentation, and sustainable agricultural growth.

Table 18: Details of awards conferred upon Scientists/ farmers under the Farmer FIRST Programme (FFP)

Sl. No.	Name of the awardee (Scientist/Farmer)	Name of the award	Year	Conferring authority	Purpose
1.	Dr. S. K. Mishra	Krushi Ratna award	2018	Bharatiya Krishak Samaja	Significant achievements in transfer of technologies and increasing farmer's income
2.	Sri Bhima Charan Das	Padma Bhusan Dr Radhanath Rath Memorial Award	2018	Bharatiya Krishak Samaja	Adoption of improved rice and vegetable production technologies, enterprising vermi-composting and organic betel leaf production

3.	Sri Shiba Narayan Samal	Best Innovative Farmer	2017	ICAR-CRRI	Excellence in HYV rice and commercial vegetable farming
4.	Sri Udhab Charan Padhi	Best Innovative Farmer	2017	ICAR-CRRI	Excellence in HYV rice and commercial vegetable farming
5.	Sri Sangram Keshori Pani	Best Innovative Farmer	2018	ICAR-CRRI	Involvement in rice-based integrated farming, mechanization in rice farming and a potential Farmer Leader.
6.	Sri Bhima Charan Das	Best Innovative Farmer	2018	ICAR-CRRI	Involvement in rice-based integrated farming, mechanization in rice farming and a potential Farmer Leader.
7.	Smt. Sanjukta Barik	Best Woman Farmer	2018	ICAR-CRRI	Leadership role in allied agriculture
8.	Smt. Kuni Samal	Best Woman Farmer	2018	ICAR-CRRI	Leadership role in allied agriculture
9.	Smt. Rebati Sethi	Best Woman Farmer	2018	ICAR-CRRI	Leadership role in allied agriculture
10.	Smt. Santilata Samal	Best Woman Farmer	2018	ICAR-CRRI	Leadership role in allied agriculture
11.	Arati Behera	Best Woman Farmer	2018	ICAR-CRRI	Leadership role in allied agriculture
12.	Smt. Azima Bibi	Best Woman Farmer	2018	ICAR-CRRI	Leadership role in allied agriculture
13.	Smt. Binodini Biswal	Best Woman Farmer	2018	ICAR-CRRI	Leadership role in allied agriculture
14.	Smt. Arnapurna Biswal Biswal	Best Woman Farmer	2018	ICAR-CRRI	Leadership role in allied agriculture
15.	Sri Rajan Kumar Behera	Best Farmer Award	2019	ICAR-CRRI	Commercial production of mushroom and poultry
16.	Dr. S. K. Mishra	Best Poster Award	2020	ICAR-CRRI	Published a paper on “Enhancing crop productivity and farmers’ profit in rice based production system: A successful case study of NRRI Farmer FIRST programme”
17.	Sri Shiba Narayan Samal	Innovative Farmer Award	2020	ICAR-NAARM	Scientific packages of practices were adopted in rice–vegetable cultivation with the integration of farm mechanization.
18.	Sri Ranjan Kumar Behera	Innovative Farmer Award	2021	ICAR-IARI	Commercial mushroom and poultry production

19.	Sri Shiba Narayan Samal	Innovative Farmer Award	2021	ICAR-IARI	Scientific cultivation of rice and vegetables; farm mechanization for cost reduction.
20.	Smt. Pravati Pani	Best Woman Farmer	2021	ICAR-CRRI	leadership role in agriculture and allied areas
21.	Smt. Nirmala Pradhan	Best Woman Farmer	2021	ICAR-CRRI	leadership role in agriculture and allied areas
22.	Dr. S. K. Mishra	Best Project Award	2021	ICAR-CRRI	For Best Externally Aided Project (EAP-228)
23.	Sri. Braja Kishore Jena	Innovative Farmer Award	2021	ICAR-CRRI	adoption and promotion commercial vegetable cultivation
24.	Sri. Manoranjan Rout	Innovative Farmer Award	2021	ICAR-CRRI	adoption and promotion commercial vegetable cultivation
25.	Sri. Purna Chandra Behera	Innovative Farmer Award	2021	ICAR-CRRI	adoption and promotion commercial Mushroom farming
26.	Smt. Kanchanbala Das	Innovative Farmer Award	2021	ICAR-CRRI	adoption and promotion commercial vegetable cultivation
27.	Sri. Sangram Keshari Pani	Innovative Farmer Award	2022	ICAR-IARI	Significant contribution in the field of agriculture and allied activities
28.	Smt. Mamta Biswal	Best Woman Farmer	2022	ICAR-CRRI	Involvement in adoption of NRRI Rice Varieties & Technologies
29.	Sri. Surendranath Swain	Best Farmer Award	2022	ICAR-CRRI	Involvement in adoption of NRRI Rice Varieties & Technologies
30.	Sri. Rakesh Kumar Sahoo	Best Farmer Award	2022	ICAR-CRRI	Involvement in adoption of NRRI Rice Varieties & Technologies
31.	Puspita Samal	Best Farmer Award	2022	ICAR-CRRI	Involvement in adoption of NRRI Rice Varieties & Technologies
32.	Bimbadhara Samal	Innovative Farmer Award	2023	ICAR-CRRI	Improved horticulture practise by adopting technologies
33.	Balaram Jena	Innovative Farmer Award	2023	ICAR-CRRI	Best IFS module
34.	Menaka Mohanty	Best Woman Farmer	2023	ICAR-CRRI	Leadership role in allied agriculture
35.	Smitashree Bhuyan	Best Woman Farmer	2023	ICAR-CRRI	Leadership role in allied agriculture

36.	Dr. B Mondal	Best oral presentation	2024	ICAR-CRRI	Best oral presentation during the workshop "Enhancing livelihood through module-based interventions in farmer FIRST: Impact of seven-year journey.

Way forward

The Farmer FIRST Programme (FFP) demonstrates that a participatory, technology-driven, and enterprise-oriented approach significantly enhances farm productivity, profitability, and livelihood resilience. Future efforts should focus on scaling and institutionalizing these proven interventions. Such convergence will ensure sustainable impact across diverse agro-ecological regions and farming communities.

- Firstly, varietal replacement and crop diversification must be expanded as a core strategy for enhancing system productivity and climate resilience. Future interventions should emphasize precision crop management, including site-specific nutrient management, real-time pest surveillance, and mechanization-supported operations, to further optimize input use efficiency and sustain high benefit–cost ratios.
- Secondly, scaling up trellis systems, shade-net cultivation, and hybrid vegetable adoption through cluster-based models, custom hiring centres, and market-linked production planning will help farmers transition from subsistence to market-oriented, high-value agriculture. Strengthening post-harvest management, grading, packaging, and direct market linkages will be critical to minimizing losses and stabilizing price realization.
- Thirdly, future strategies should prioritize integrated crop–livestock–fish systems, efficient nutrient recycling (vermi-compost, duck–fish integration), and adoption of productivity-enhancing inputs
- Developing the women led enterprise activities into viable rural micro-enterprises through standardization of processes, branding, food safety compliance, access to credit, and digital marketing platforms. Strengthening women-centric producer groups and linking them with government schemes and private value chains will enhance income diversification and social empowerment.