OUTREACH ACTIVITIES 2022-23



AGRO-ECONOMIC RESEARCH CENTRE, PRAYAGRAJ UNIVERSITY OF ALLAHABAD





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The Agro-Economic Research Centre, Prayagraj undertakes outreach activities to rural villages covering several issues of concern of the farmers. These outreach activities which have been a regular feature of the centre's activities focussing on following objectives:

- 1. To educate the farmers on government schemes and programmes for agriculture.
- 2. To motivate them to adopt mobile-friendly Applications to adopt and monitor government schemes tailor-made for famers benefits.
- 3. Awareness generation on various government support chains for availing subsidized farm inputs (seed minikits, fertilizers, etc.)
- 4. To act as a grievance redressal mechanism between farmers and government stakeholders and bridge the hiatus.
- 5. Any other issue or scheme that requires immediate intervention and awareness.

For the year 2022-23 the AERC, Prayagraj undertook the following outreach activities detailed as under:-

1. Judicious Choice of Edible Oil by Quantity & Quality

Villages Covered- Sarai Beersinghpur urf Sarai Bahar, Soharwa, Ismailpur, Berigadhiwa and Nagla Summera

Oilseed crops are the second most important commodity contributing significantly to the agricultural economy. Changes in consumer dynamics like growing health consciousness and urbanization are bringing the next wave of growth for the edible oil industry. Further, the changing eating habits, ready-to-eat packaged food and the rising trend of eating out are expected to foster India's edible oil consumption.

The AERC, Prayagraj took cognizance of the issue changing consumption patterns and dietary changes of the people. We undertook intensive village level awareness generation programmes covering villages Sarai Beersinghpur urf Sarai Bahar, Soharwa, Ismailpur, Berigadhiwa and Nagla Summera from five districts of Prayagraj, Bahraich, Bareilly, Fatehpur and Mathura respectively.



Our research team educated the farmers and local villagers especially women on following issues:

- Mustard oil consumption was promoted as it had better health benefits from the point of view of its high smoke point and low fat percentage.
- Hazards of Using loose oil: It was discussed through FGDs (Focussed Group Discussions) that majority of consumers preferred to use loose oil. For those who indigenously produced mustard oil from their own mustard seed produce for consumption, the quality was ensured but the issue was grave for most of the villagers who preferred to use loose non-brand oil.
- Raising Issues of Health Concerns: Supply point for oil consumption was mostly local shops where non-branded loose oil especially mustard oil was available. Health concerns become a grave issue when people were found not very concerned about health issues.
- Quantity Concerns: Awareness was provided on optimum use of edible oil to maintain per capita consumption requirements at the recommended level.
- Making the Correct Choice of Edible Oils: Villagers affirmed that given choice of edible oil, viz. price of oil or health; they would prefer for price. Thus, choice of oil mostly was governed by price and not by quality. The villagers were made aware that making correct and healthy choices of edible oils may defer the health risks and reduce their expenditure on medical needs in the long run.
- > Single Use of Oil: Awareness was provided to the homemakers (women) that they should not use residue oil time and again.
- Changing Food Habits: We also advocated for healthy choice of food items. Roadside vendors using loose oil could be hazardous for health. So choices need to be judiciously motivated.

2. Importance of Land Titling

Villages: Sisandi, Bhaudari, Jabrauli, Gaura of Lucknow District and Bargarh, Mawaigird from Jhansi District

Land productivity and 'ownership of land, mainly with clear title'; plays the most vital role in agricultural development both at micro i.e., farmer's household level as well as at macro i.e. regional level, for the simple reason that when there is no land as an owned asset to a farmer, there is no incentive as well, other than the very 'subsistence'.

In continuation with this proposition the AERC research team went ahead to educated farmers on benefits of clear title land ownership and how it enable them to become eligible for government benefits and schemes. Farmers were selected from villages Sisandi, Bhaudari, Jabrauli, Gaura of Lucknow District and Bargarh, Mawaigird from Jhansi District.



The various issues pertaining to clear and non-clear land titling were discussed:-

- Farmers were educated that ownership of land enables their access to technology, extension system, financial institutions, government subsidies, bank loans, social and welfare schemes towards enhancing farmer's economic status.
- The farmers were made aware of the modern modes of farming and were motivated to adopt profitable cropping pattern.
- All the farmers of the clear title land had head of households as main cultivator. 85 per cent of household heads on overall basis had previously land on their parental

name, who were no more alive. Availing the benefits of government schemes was highly constrained in case of NCLT farmers.



- ➤ Grievance Redressal of the Farmers via Coordination of Gram Sabhas: The research team coordinated with the gram sabha and ensured participation of various social groups in our village level meetings. This ground level activation beyond any doubt improved the participation of all these tillers who were members of gram sabha.
- Activating/revitalizing the Gram Sabhas: It was also emphasized in these outreach activities that the gram sabhas need to hold regular meetings and take up the issues and grievances of the farmers from time to time especially updating their land records. The farmers reported that when such meetings were not held regularly, the problems and issues of the farmers were not redressed adequately. Therefore, the gram sabha members of the respective villages were educated and motivated that they should be activated and become functional then the participation of all these tillers who are members of gram sabha can be ensured. Such groups have larger implications on economic and social status and generate mass awareness among the members.

3. Motivation for Adoption of Soil Health Card

Villages: Bongi, Nigdilpur, Malakbela of Prayagraj District, Sariyan, Kedki, Hewaly and Mamraipur of Hardoi District, Tikmapur, Mohammadpur Azmabad, Goramahuagad and Kudaiya of Shahjahanpur District



Under Soil Health Cards (SHCs) Scheme introduced in the year 2014-15, a massive programme of soil sampling, testing and generation of SHCs was launched to assist State Governments to issue soil health cards to all farmers in the country. Soil health card provides information to farmers on nutrient status of their soil along with recommendation on appropriate dosage of nutrients to be applied for improving soil health and its fertility.

12 model villages were selected for the intervention. As per the given norms awareness on following issues of the scheme was imparted:

- 1. **Understand the indigenous soil quality**: In order to enhance the quality of the soil it was important to do soil testing. But it was found that majority of the farmers normally did not test their soil for fertilizer application in the crops.
- Proper Dissemination: In focussed group discussions with the farmers and the stakeholders, it was discussed that the soil samples need to be collected in a scientific way. Further, the results of soil test were required to be properly communicated to the farmers at proper time.
- 3. Regular training programmes, seminars, farmer's fair/mela were coordinated and conducted on important components of Model Village Programme-Soil Health Card scheme. These are several important ways to raise the awareness and to disseminate SHC based recommendation among the farmers across the country. It

helps in judicious application of chemical fertilizers for good growth of crops. The regular testing of soil is very important for careful use of chemical fertilizer to preserve the soil health for a long time.



4. Improved and Judicious Fertilizer Application: As an Outcome of our intervention under the MVP-SHC scheme there was significant positive impact. The consumption of nitrogen was 102.58 kg per acre before our intervention which increased to 117.67 kg per acre, showing 14.71% increase. The consumption of phosphorous was 72.67 kg per acre before MVP-SHC Scheme increased to 96.82 kg per acre, showing 33.22% increase post intervention. Majority of the sample farmers who were not using potash before MVP-SHC Scheme, after the implementation of MVP-SHC Scheme almost all sample farmers had used optimum dose of potash. The consumption of N, P and K was almost close to the recommended dose on the sample farms.

4. Understanding Farmers and their Issues: Attempt to Contain Farmers Suicide Card

Villages: Dalwapurwa village from Lakheempur district, Pipra Khera from Fatehpur, Patnau from Hamirpur District and Panthari from Banda District

As agriculture is the backbone of entire Indian economy, in the same way an 'Indian farmer' is the main pillar of country's entire agricultural structure. The agricultural sector has usually been crippled and has not been able to reach its full potential for varied reasons like small land holdings, monsoon dependency and lack of irrigation facilities, availability of cheap credit and insurance etc. Due to these multiple factors coupled by the illiteracy, unawareness of government schemes, vicious circle of poverty and social taboos lead to poor farm productivity and losses.



Taking cognizance of the various issues of concern that the farmers grapple with, ventured we to intervene in the districts with high prone farmer suicide rates. In our outreach/intervention programme we tried to grapple with issues of the farmers

and tried to understand the causal reasons for opting for such dire options.

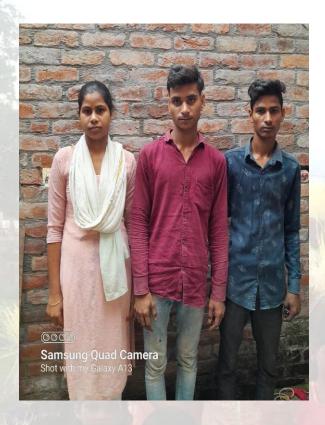
Case of- Shakeel Ahmed Household Type: Revisiting

Age: 30 years

Place: Kabadiyan Tola, Sadar, Lakhimpur Khiri

Shakeel aged 30 years was married to Sibtun Nisha and had three children. He was motor-mechanic and had his own petty business to suffice his family needs. These children were hardly 12-14 years of age when Shakeel took this drastic step of committing suicide. Shakeel had no agricultural land and was subsisting only by means of this petty business. He used to have frequent

disputes and quarrels with hsi wife on financial issues. Sibtun was an aspiring woman and wanted to have all the pleasures of life, but Shakeel was focused on his children and gave them priority. His earnings were not enough to suffice her rising demands.



When such quarrels became infrequent and took violent shape, the things turned from worse to worst. Shakeel eventually gave up and stopped communicating with anyone. One day tired and frustrated, he committed suicide.

Interestingly, Sibtun had no remorse to this. After a few days of the death of her husband, she got married to her fiancé with whom she already had extramarital affairs. In a row toget rid of her family responsibilities (children), she sold the residential property and left the village. Children who were staying with their maternal uncle then, came to now this. They were stranded completely and had nowhere to go.

Their maternal uncle who had no issues, accepted them and now all the three children stay with him. While the daughter takes care of all the household chores, the sons work as motor mechanic in a petty shop and earn their livelihood. In a way the uncle's family and these children mutually suffice the needs of each other. Sibtun never turned up in these five years and preferred to

stay away from her children. The research team failed to get connected with her.

1. Understanding the situation: To have a proper understanding of the situation we tried to visit the victim families where cases of farmer suicide were found. Further, we tried to individually discuss with the families in our door to door visits the causes of farmer suicides like family problems, chronic ailment, indebtedness/loans, land dispute; property disputes, crop damages/loses due to hailstorm, heavy rains or droughts etc.; unaffordable costs of seeds, fertilizers, pesticides, irrigation charges, high costs of labour and equipment /machineries required for cultivation purposes, lack of market integration, low farm product returns and many other issues.



- 2. Multiplicity of Causal Factors: It was assessed that in many cases, more than one reason for suicide was reported subject to varying impact and after effects on farmers. Even a single factor like indebtedness/non-payment of loans from banks or private money lender led the farmers in deep distress and compelling him/her to take the drastic steps of ending the life.
- 3. Awareness Generation on Schemes: The research team conducted village level awareness on various schemes, programmes and methods in which many of the economic, farming related and debt issues could be addressed. The research team of AERC discussed with farmers the various schemes like the farm debt-waiver scheme, PM Kisan Scheme, KCC, PMFBY. The farmers were also made aware of farm inputs like seed mini-kits etc.

4. **Education on Loan Management:** Drawing our undersstanding from the issue that many farmers committed suicides due to improper debt management. They were educated that judicious channelization of the loans or debt need to be prioritized.

5. Paddy Stubble Management and Waste Management & Use of Modern Techniques

Villages covered: Several villages from western Uttar Pradesh covering Khandhla, Shamli, Bulandshahar, Gulaothi, Hapur and Garmukteshwar were addressed

Burning of the crop stubble in the field, particularly 'parali burning' is not new and has been in common practice. Traditionally, the crop residues were used in various on-farm and off-farm activities having great value to the farmers. But, in recent years the problem of burning agricultural biomass residue, particularly paddy stubble has resulted to alarming situations in terms of its adverse effects on environment, leading to health related problems and ailments to human population alongwith livestock, bovines, herbs and shrubs apart from damaging soil nutrients and thus deteriorating land's crop productivity potential.





Taking accord of this acute problem, the AERC team ventured to educated the farmers and generate awareness on various ways and means to address stubble management.

Phase II: It was further assessed that those farmers that adopted Paddy Stubble Management (PSM) techniques, and existing farmers who were Paddy growers adopting PSM

techniques benefitted in multiple ways.



Awareness was provided covering following benefits of Paddy Stubble Management:

- Increased soil fertility due to bio-diversity in productivity of Rabi crops.
- Reduced consumption of urea, insecticides and weedicides. Farmers were educated to adopt PSM techniques -Incorporation (shallow) compared to Incorporation (deep)
- Farmers were educated that with adoption of PSM, there would be reduction in variable costs compared to Non-adopters of PSM. This would result to a relatively higher ROVC (Return over variable cost).
- ➤ Various other farmer issues like germination of seed, crop productivity, straw clogging, frequency of wear and tear, maintenance during storage, operational timings and custom hiring charges etc. were also discussed.

6. Motivating Farmers to Adopt PM Kisan Scheme

Outreach villages:

Pradhan Mantri Kisan Samman Nidhi (PM-KISAN) is a new Central Sector Scheme to provide income support to all landholding farmers' families in the country to supplement their financial needs for procuring various inputs related to agriculture and allied activities as well as domestic needs. Under the PM-KISAN scheme, all landholding farmers' families shall be provided the financial benefit of Rs. 6000 per annum per family payable in three equal instalments of Rs. 2000 each, every four months.



- The Agro-Economic Research Centre under its regular Outreach programme undertook to generate awareness on the benefits of the PM Kisan scheme among farmers.
- The farmers who were already registered under the scheme were educated on the judicious utilization of the funds for productive purposes. The beneficiary farmer groups were made aware that fund diversion and its use in unproductive or non-agricultural purposes would lead to failure of designated aim of the scheme.
- Understanding the Grievances of the Farmers: The farmers in turn also intimated that cash transfers under this scheme should be made during the peak season of the crops as it would be helpful in checking the diversion of the funds to unproductive activities.

- ➤ Educating Farmers on Options for Registration Process: The farmers were made aware on the simple registration procedures that would help them to register as beneficiaries. Most of sample beneficiaries reported that they faced some difficulties in getting revenue records, opening of bank account etc. during, the registration process under PM-Kisan Scheme.
- ➤ Dissemination of Information on the Scheme and Its Utility: Regular awareness programmes of the present proto-type are regularly organized at village level by AERC, Prayagraj to propagate the benefit of PM-Kisan Scheme. The farmers were also educated that eligible farmers should attend the village camps or farmers mela to get better equipped with the government outreach programmes and schemes.

7. Sugarcane Transportation & Harvesting Cost: Issues and Concern

Villages Covered: Muda Pasi, Bargrethi from Lakhimpur Block, Lukadadi from Najibabbad block of Bijnor District

Sustainable cultivation of sugar requires three main contributing factors to sustain

- i. Timely payment of all the dues by the sugar mills as well as sugarcane growers.
- ii. Remunerative prices to farmers by the government for their sugarcane produces
- iii. Sugarcane harvesting and transportation facilities

The AERC took into consideration the issues and concern of the farmers regarding transportation and harvesting of sugarcane growers. In our outreach we especially targeted the marginal & small farmers.



Discussion on Problems of Farmers: The farmers shared with us that of the total sugarcane produce was sold in entirety to the Sugar Mills owners. Therefore, we discussed with the farmers on the involved harvesting cost of sugarcane using different modes of harvesting, transportation cost from farmers' field to the sugar mills and other selling points using different modes of transportation. Further we discussed with the farmers on the various factor/input costs in the overall harvesting and transportation costs.

Educating Farmers on Mechanized Harvesting Methods: The team discussed with the farmers on the possible methods of mechanized harvesting as well as mechanized loading/unloading facilities in general and marginal and small farmers in particular.

Shortage & Excess: The sugar mills face problem of inadequate supply of cane during slack season while during peak season they get cane supply even more than their crushing capacity.



8. Motivation and Awareness generation on Benefits of Micro Irrigation through Per Drop More Crop Scheme

Villages Covered: Manpur, Ganrahi and Lohra from Robertsganj block, Pagiya, Bar and Khairpur villages of Ghodrawal block of Sonbhadra district

Irrigation is one of the primary inputs formidable for good agricultural productivity. But given its scarcity, it is important that we advocate for its judicious and optimum use. The AERC, Prayagraj team as a part its regular *initiatives undertook to educated the farmers on optimum utilization of water resources for irrigation promoting the cause of micro irrigation.* Following benefits of micro irrigation were discussed with the farmers:-



- 1. Micro irrigation would help enhance farmer's income through higher crop productivity.
- 2. Cost effective in the long run as it would significantly reduce water use.
- Adopting this most advanced and innovative irrigation technique; i.e., Micro-Irrigation (MI), mainly consisting of drip and sprinkler methods that are based on principle of pressurized irrigation.
- 4. It is a solution for farmers of water scarce regions to raise water use efficiency in respect of crop irrigation- lifting, harvesting, shifting from water plenty to water scarce areas etc.

5. Through use of improved irrigation practices, among which the prime one, based on pressurized water flow irrigation system, is the MicroIrrigation (MI) technique, mainly consisting of Drip/Sprinkler irrigation device.



9. Understanding the Socio-Economic status and Concerns of Khatangiya Village-Intensive Approach

Village: Khatangiya, Meja Block, Prayagraj District

The AERC, Prayagraj in the year 2020, revisited the Khatangiya village to understand the changes and transformation in the socio-economic and overall profile of the village. The team discussed with the farmers in open group discussion, door to door visits and common awareness camps on various issues related to farm management, agricultural production and storage management.



The farmers openly discussed their problems on a common platform provided by the AERC which also included some village and block level functionaries as well. Several issues enlisted below were discussed:-



- 1. Problem of Erratic rainfalls: the farmers were advised to opt for suitable crop diversification incorporating millets and vegetable farming as well alongwith staple production.
- 2. Awareness on various Agricultural extension services to the needy farmers were provided by Govt. and other suitable agencies in the village. In summers (Zaid) season suitable varieties of vegetables or rainfed crops must be grown to increase the cropping intensity by the cultivating households.
- 3. Awareness was also imparted to the farmers and they were motivated to go for animal husbandry to cushion their income loss in case of agricultural failures.

10. Problems and Concerns –Feed and Fodder- Understanding the Concerns of the Farmers and Suggesting Solutions

Villages Covered: Muda Pasi and Bagrethi villages from Gola Gokaran Nath and Mohamadi blocks respectively from Lakhimpur Khiri District

This was an outreach programme focussing on reaching out to the agricultural farmers and livestock rearing farmers. The AERC team endeavoured to understand the specific problems of the farmers. Further, the team trained them to understand the importance of livestock as a source of income at the farm level.



Under the feed and fodder development programme the farmers were trained by experts to adopt cultivation of fodder and grass to be used for grazing purposes for the milch animals. A training module on livestock feed and forage innovations were conducted covering interested farmers. The capacity development training module comprised of issues including cultivated forages, fodder, trees, crop residue management, feed formulation, estimating feed demand at scale, forage seed system, scaling and media coverage of feed and forage technologies.

