## Needs and Vulnerability Assessment Workshop 1<sup>st</sup> and 2<sup>nd</sup> February 2020 KVK Sujani, Jharkhand

The two day workshop was organized at KrishiVigyan Kendra (KVK) Sujani in project area in Jharkhand on 1st and 2nd February 2020. A total of 67 farmers and CSO representatives including 35 women participated in the workshop. The participants also included four agriculture scientists from KVK Sujni scientist (Mr. Parimal Kumar, Dr. Rajan Kumar Ojha, Dr. Poonam Soren, Anil Kumar Rai), social and environmental scientists (Mr. Soumya Dutta), former block development Officer (Mr. Ravindra Kumar Pathak), progressive farmer (Mr. Gokul Kumar), partners from all states and farmers participated in the workshop. While the first day was devoted to nteraction with farmers and inputs from the resource persons; field visit was organized to provide hands on experience of assessment and corrective measures to reduce vulnerabilities on the second day.

The objective of the workshop was to identify vulnerabilities and need of the farmers especially in the context of pulse production and to come up with a concrete adaptation plan. While the first day of the workshop mainly adopted the case study or narratives approach, on the second day farmers were provided hand on support on vulnerability reduction and adaptation.

In the inaugural session, Mr. Anil Kumar Ray (agricultural scientist) emphasized the nutrient management by growing pulses. He said that pulses help nitrogen fixation in the farms which reduces the requirement of urea. He also talked about other organic sources of nitrogen fixation (like palash leaves). Dr Poonam Soren talked about the importance of organic manure and its role in agriculture. Parimal Kumar talked about the need to address soil fertility through nutrient management and cattle management. Mr. Ravindra Kumar emphasized the increasing role of women and especially tribal women/farmers in agriculture and access to land. He also talked about latest developments in access to land for women farmers.

Mr. Soumya Dutta explained the methods of participatory and problem oriented vulnerability mapping like Participatory Rapid Assessment (PRA), transect walk, observation etc. He also emphasized on seasonality mapping (mapping occurrences of extreme weather events like storms, hail storms, attack of animals, pests and diseases, who is most affected), livelihood mapping (availability of agricultural and nonagricultural livelihoods in different seasons to enhance farmers income etc.), and seasonal natural resources mapping. He added that based on these mapping farmers can come up with a resilience plan, which will reduce their losses and vulnerabilities.

The farmers learned about soil fertility management, water conservation, to identify the diease in plant, farm boundry management, identify the slop of farm.

The farmers from all the states were asked to identify risk/hazards/vulnerability and the resource persons provided inputs on all the areas.

Among the major vulnerabilities identified were;

- Low generic yield of pulses
- Pests attack
- Attack by stray animals
- Micronutrient deficiency and soil fertility
- Lack of water and moisture
- Lack of fertilizers and seeds
- Delayed rains and therefore disruption of crop cycles
- No procurement of pulses

The resource persons, scientists and progressive farmers interacted with farmers in detail over each identified vulnerabilities. They suggested several methods/adaptation practices to overcome these vulnerabilities

In situ water harvesting: The resource persons impressed upon the need for creating farm ponds for in situ ran water harvesting. They emphasized that it should not be deeper than 5 feet so that accidental drowning (man/animal) does not take place. They also emphasized on the need to divide the field into various blocks and make ponds at the several points on the elevation/incline so that it prevents water and soil run off. It was suggested that best dimensions for creating small farm ponds were (3\*3\*3), (5\*5\*3), or (10\*10\*3) depending on the size of the farm.

Boundary management: The scientists highlighted that boundaries can be used to promote organic pits and also mixed cropping so that it retains maximum organic content and moisture in the field.

*Organic pits:* The resource persons also explained the mechanics of making organic pits so that farmers can make organic fertilizers on their own fields.

Stray/animal management: Stray animals have been one of the biggest problems that farmers have been facing and pulse fields are especially vulnerable to farmers attack. One of the reasons of increased animals attack on the pulses field was also due to the fact that since all farmers grow rice and wheat, they contain their animals during that period. However, since only few farmers grow pulses during rice fallow period and the availability of fodder is less during that period, farmers generally let their cattle loose during that period. The farmers were encouraged to avail of the subsidies that some of the state governments provide for fencing (but there are costs involved..). They were also suggested to grow long plants like (XYZZX) on the boundaries for preventing animals entering the field.

*Community managed seed banks:* To deal with the lack of seeds, farmers were asked to develop community managed seeds banks.

*Help from the KVKs*: The scientists from the KVKs also emphasized how they can help the farmers (pest management, improved seeds, research, extension workers etc.)

On the second day the farmers were provided training on the field of Jiva Soren in creating organic pits, farm ponds and boundary management.

## Agricultural scientists interacting with the farmers











## Hands on training in the field









## **Coverage in local newspapers**



