



GOOD FARMING – GOOD FOOD

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NEWSLETTER



WORLD FOOD DAY

World Food Day is celebrated annually on 16 October to promote global awareness and action for those who suffer from hunger, and to highlight the need to ensure healthy diets for all. The Food and Agriculture Organization of the UN (FAO) designated 16 October as World Food Day in 1979.

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Good Farming – Good Food

Sustainable Food and Nutrition Security and Transforming Smallholders' Livelihood
Solidaridad Regional Expertise Centre





GOOD FARMING – GOOD FOOD

FROM THE PEN OF PROGRAMME COORDINATOR



Dear Readers,

Amid the growing challenges in sustaining livelihood and income, the farmers are facing a daunting task of climate change. This is affecting the farming and crop production in many ways. Farming is not only a livelihood option but also a basic requirement of food and nutritional security for millions of rural families. In the current production system smallholders are seen to be a lot more vulnerable to adverse impact of climate change in terms of rise in

cost, sustained losses due to biotic and abiotic stress coupled with volatile market situation. The farmers require to be oriented on efficient use of resource be it soil, water, labour, energy which can help reduce cost and improve its sustainability. The present scenario also require farmers to adopt climate smart and ecological methods of production which is resilient to environmental challenges, mitigate risk and adapt to changes.

Solidaridad had been consistently working in promotion of climate smart production practices in all its target districts with a sense of satisfaction. These practices are finding wide acceptance among the smallholders as it builds upon their traditional skill, available resources and inclination to adopt in scale. Our efforts is also meant to strengthen health and nutritional outcome of the community and therefore efforts are being made to organize community resources, provide awareness and sensitization on importance of balanced nutrition, importance for different age and vulnerable group.

The community led institution like FPOs, SHG, Farmers collective, line department are slowly gearing up to these realities and coming together to address the challenge. Solidaridad continue to engage itself with supportive organizations and Institutions like ICDS, CIAE, IISR, KVK and MPSRLM etc in execution of programme goal and objectives in true letter and spirit.

The month of October was marked by a series of training and capacity building programme with farmers, women members, FPOs and field extension functionaries. The organization is also working pro-actively in setting the target for the next six months as we come to end of the Kharif season and a plan for execution of Rabi (Winter season) is actively being pursued.

We bring you a glimpse of key activities undertaken by us in active participation of community and stakeholders in areas of FPO strengthening, promotion of GAPs, Nutritional empowerment of community and helping farmers with new tools of climate smart practices.

We hope our readers will find this edition of Newsletter very productive and educative.

With best Wishes
Dr Suresh Motwani
Programme Head
Solidaridad



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Ground Activities

POST-HARVEST MANAGEMENT AND STORAGE OF SOYABEAN

Under the programme Good Farming – Good Food, farmers acquire the improved knowledge of harvesting and post harvesting management i.e. drying , threshing , grading and storage. The farmers from the five districts of Madhya Pradesh took keen interest in learning the new and improved methods of harvesting and storage from the team Solidaridad during field visits on regular basis.

Due to occurrence of prolonged dry spell in this year of Kharif at the beginning of June-July , the sowing operation of Soybean got delayed up to mid -October . This led to delayed harvesting of the crop which lasted till October end. The late sowing of crop was managed with increased seed rate by 25 % and also reducing the inter row-spacing of the crop from 45 cm to 30 CM. These crop resilient methods ad advised by our subject expert proved helpful to overcome climate induced challenges and help farmer obtain optimum yield. With the beginning of the month, our prime focus was to create awareness about right harvesting stage and postharvest practices.



Soy sun drying

The farmers were suggested to harvest the soybean soon after its maturity. It is necessary to harvest at the right time. Harvesting should be done on attaining physical maturity.

The farmers were advised to adopt proper harvesting method in Soybean when the plant leaves and Pods turn to yellow /brown colour and the grain changes its colour to golden yellow and hard shape. The grain moisture at this stage is about 17 %. Farmers were advised to keep the heap of harvest for sun drying up to 3-4 days till the grain moisture reaches to 10 %. This is followed by threshing. Again, threshing is very critical for good quality grain. To reduce cracking or breaking of grain, farmers were advised that the speed of threshing drum should be adjusted in between 350-400 RPM.

The farmer were advised to undertake after drying the seeds, they should be brought to the place of storage carefully after filling them in bags. The good quality bags are often used to make the process effective. For sowing in the next season, carefully place the protected seed on a wooden or iron



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...POST-HARVEST MANAGEMENT AND STORAGE OF SOYABEAN

platform or on a thick layer of straw. Threshing should be done carefully, as any kind of severe beating or trampling may damage the seed coat, thus reducing the viability of the crop and the quality of the harvest.

Harvesting and storage might be the last in the practices of agriculture, but it remains to be the most crucial stage where the grains finally find its quality. After harvest, seeds need to be stored and kept for the next planting season. Seed moisture determines the length of seed storage life. If the crop is harvested when there is high moisture content, the longevity of the seed is reduced dramatically. For example,

seeds with high moisture can be more susceptible to fungus or other storage pests. Hence, reducing seed moisture is the first step for seed vigour and viability.



Ground Activities

ORIENTATION ON YIELD ASSESSMENT

Agricultural statistics are a vital part of agricultural planning and management. It is not just the farmers but also the government and agriculture-based players who are interested in accessing the size of crop harvest. The harvest estimation helps the farmer and the government make a conservative food balance and ensure food security for a particular period of time. Farmers from developing and underdeveloped countries have often encountered difficulties in making the correct appraisal of their crops due to a lack of resources and guidance.

The crop-season-long process, in which the lead and participating farmers are encouraged to participate, starts with selecting a demonstration plot from the total area of cultivation. The controlled plot (rest of the plot) is prepared and maintained by the practices followed by the farmer, whereas recommended and good agricultural practices by the field experts of Solidaridad.

The demonstration plot also serves as a training ground for the farmers enrolled in the programme. The variety of seed grown in the demonstration plots remains similar to the one in the controlled plot. While the farmer is allowed to maintain his own choice of variety, the one chosen for the demo plot also goes through various practices like germination test and seed treatment. The yield assessment process starts with selecting four to five sample collection area from both plots. A square meter of the area is brought under the sample collection, and the number of plants, number of pods per plant, plants per square metre, number of grains per pods or ear in a plant per square metre, weight of grains



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...ORIENTATION ON YIELD ASSESSMENT

per square metre etc. is brought under records for comparative analysis. The results are then made available to the farmers.

The lead farmers who were part of our Front-Line Demonstration were provided hand holding in terms of yield estimation by square method (1mx 1m). Hand holding and facilitation support was given to the farmer on his plot in estimation of yield. The estimate with regard to number of plants per square meter, number of pods per plant, number of grain per plant, seed weight of 100 grain and also total grain was calculated for both control and demonstration plot.



Data was also collected with regard to the cost of cultivation which includes, land Preparation, labour, agri inputs, transport, family labour etc. Farmer Field School level training was organized by the training module where farmers were given detailed knowledge and know how about right harvesting stage, drying, cleaning, threshing, winnowing and storage. Each of these steps are critical to meet FAQ (Fair Average Quality) which is determinant of the market price. The programme Good Farming – Good Food has brought many farmers under the learning process of yield assessment and strives to educate more in the coming years about its benefits.

Ground Activities

PRE-SOWING PRACTICES FOR RABI CROP



The month of October is also time of undertaking preparatory activities for Rabi field preparation. Solidaridad in view of the crop season of Wheat and Gram prepared the training calendar and training modules covering aspects like land preparation, sowing method, seed practices, intercultural operation and weed management, irrigation Management, Integrated Nutrient Management and Integrated Pest Management. Besides this year we are going to undertake 50 Front Line Demonstration out of which 40 would be on Wheat and 10 would be on Chick Pea in each project district. The Procurement of Good quality seed of Wheat like Pusa Tejas (HI 8759) and Pusa Purna(HI 1544) and for Chick Pea the variety RVG 202 has been procured and supplied to the respective

district along with seed treatment inputs like Azatobactor (Non symbiotic Nitrogen fixing bacteria for wheat crop), PSB . The variety Pusa Tejas is HYV of Wheat with yield potential up to 65 to 70 q/ha , and has been released recently in 2016 .



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...PRE-SOWING PRACTICES FOR RABI CROP

The variety is resistant to wilt, Karnal bunt and lodging which causes heavy losses to the crop yield. The variety HI 1544 (Pusa Purna) is timely sown and combines high water use efficiency, early maturity, strong disease resistance with excellent grain quality wheat cultivar. It can be cultivated in limited irrigation also with wide adaptability. The variety RVG 202 of Chickpea (Bengal Gram) is resistant to Wilt, root rot, collar rot disease which is major problem in chickpea in the area causing moderate to severe yield loss and therefore its demonstration will help farmers to go for seed replacement. It is suitable for dry land and late sowing with yield potential up to 20 q /ha.

Online Session

AWARENESS SESSION ON PRE-SOWING PRACTICES IN RABI CROPS

In the rabi season, farmers from Madhya Pradesh prepare their fields for wheat, gram and mustard cultivation. Under pre sowing practices, a handful of topics like Conservation agriculture for conservation and sustainable farming of natural resources (water, land and forests) of discussion, low tillage or no-till, diversification in agriculture (crop cycle, variety cafeteria approach, diversification of inputs), balanced nutrition management, water conservation, protection against erosion etc. takes a central place of discussion.

Farmers are also requested to go for land preparation for Wheat- Immediately after harvesting of Kharif crop, prepare the field by ploughing, so that the accumulated moisture can be utilized.

It was recommended to use of zero tillage machine without preparing the field. After sowing, make arrangements for irrigation by taking out vertical (10-15 m) drains. Adopt sowing with BBF(Broad Bed and Furrow) or ridge and furrow system. The selection of seed quality also plays an integral part during the pre-sowing activities. Farmers were advised to check seed germination percentage which would eventually help the farmer decide on the final seed rate. Farmers are also requested to perform seed treatment for the holistic growth of the plant and also as a protective measure from Insect and diseases. Treatment of seed is elementary to the sowing process.

The session began with a brief background on pre sowing practices for rabi seasons and major crop like wheat ,gram ,mustard etc.A training programme to enhance the learning and understanding of farmers regarding pre sowing practices was held on Oct month. Notable and renowned subject specialist Dr Om Prakash Joshi helmed the educational exercises through an established communication channel for more than 65 farmers.

A number of pre-sowing activities already precede the sowing exercises. Preparing the fields by ploughing, removing weed and incorporation compost or well decomposed FYM(farm yard manure) is essential for sowing. Before the sowing, many farmers tested their soil for the values of Nitrogen, Phosphorus, Potassium, and its pH value. Based on the results, experts recommended the use of fertilisers in the correct quantity. With the adoption of scheduled fertilizer dosages, the farmer can expect a better yield and an excellent monetary saving in his agriculture inputs.

The farmers are also provided with the technical advisory on seed rate. The seed rate also takes in to account the size and weight of the seeds and varies accordingly. Ideally, a crop should be sown when the time, moisture, and temperature are congenial for seedlings' rapid and uniform emergence. Even the photoperiod (Sunshine hours) becomes important during such exercises for the rapid and consistent development of plant canopy.



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...AWARENESS SESSION ON PRE-SOWING PRACTICES IN RABI CROPS

The field demonstration in Kharif has helped understand the importance of optimum sowing time and right method of sowing. It helps farmers to adjust the sowing at a period wherein the crop can escape the unfavourable climatic conditions and thus mitigate climate induced risk. Such time frames can be challenging for the farmers if done without assistance and recommendation. Therefore, agricultural experts from Solidaridad assist the farmers in recognising such time frames for minimising seed deterioration.

With Good Farming – Good Food, thousands of farmers have benefited from guidance by experts under the programme. Following right sowing practices is critical to successful crop establishment and subsequent growth of the plant. The Solidaridad team of experts and field functionaries would keep bringing expert guidance to the farming community of Madhya Pradesh in the future.

Ground Activities

VERMICOMPOSTING -COMPOST BECAUSE CHANGE STARTS FROM THE GROUND UP

Vermicompost has been emerging as an important source in supplementing and substituting chemical fertilizers in agriculture. Earthworm, also known as 'farmers' friend' is naturally found beneath the soil and help farmers through soil inversion, transforming plant residue in to fertile compost also known as Vermi compost . It is a valuable input for sustainable agriculture and wasteland development. It is a growth promoter and helpful in providing hormones, Humic acids, enzymes required for plant growth.

Infertility and soil erosion are the main problems in front of farmers, the use of vermi compost improves soil structure, texture, aeration, water holding capacity and prevent soil erosion. It is an easily adoptable low-cost technology. It is much economical as compared to chemical fertilizers.

This year, Solidaridad provided some of the critical inputs which were much needed to show case the farmers about its benefits like vermicomposting bag, waste decomposer and bio compost culture, earthworms etc. to ensure composting in proper way by way of technical support and on field demo. Earthworm (*Eisenia foetida*) had been given two kilogram per bag to each composting unit and farmers had been assisted in incorporation of the same in the compost unit. It will have a container to collect vermi-wash which has multiple application as a bio pesticide, manure and growth promoters.

Each unit can generate enriched compost up to 15-20 quintal of per cycle within 40 to 45 days



Vermi wash collection by beneficiary

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...VERMICOMPOSTING -COMPOST BECAUSE CHANGE STARTS FROM THE GROUND UP

interval. This will have ripple effect as more farmers will adopt it by seeing its practical advantage for soil health and fertility. By end of October 200 such vermi-compost unit having been set up by Solidaridad is now ready with first cycle of Vermi-compost.

The Tetra pack which was earlier provided to farmers in all project district is now ready with its first batch of good quality vermi compost and the farmers have engaged themselves in proper extraction. Farmers are now across all the district are now applying this Vermi-compost in to the soil during their pre sowing land preparation of Rabi this year.



(Lead farmer with fresh natural manure - vermicompost)

The same bag is simultaneously being filled up with raw inputs like cow dung, crop residue, kitchen waste and undertaking the vermi-compost for next cycle. Farmers have properly followed the on field advisory and support in process of vermicomposting and therefore very happy to obtain the very first batch of good quality vermi compost to the extent of five to 10 quintal per bag. This is going to help farmers in reducing application of chemical fertilizer by at least 15 to 20 %.

The vermi-compost provides macro and micro nutrient to the soil in sufficient quantity apart from acting as soil conditioner, retain moisture, organic carbon and therefore in line with our objective of promoting balanced nutrition to the crop.

SDGP and its esteemed partners have made lot of efforts at ground level for the farmers of Madhya Pradesh in hopes of benefiting the environment by reducing the need for chemical fertilizers and decreasing the amount of waste going to landfills in project area to the farming community. Now farmers are more concerned about their health after corona pandemic so they want to consume organic food.

PROMOTION OF CLIMATE RESILIENT PRODUCTION PRACTICES

The input intensive production practices inevitably leads to use of HYVs, fertilizer , irrigation which is more susceptible to climate and subsequent biotic stress like pest and disease. To reduce the cost on pest management, farmers are advised to adopt protective measures which means controlling the pest before they attack the crop. One such device is light trap. Solidaridad has procured 200 such solar operated light traps which has been set up in farmers' field. The adult insect get attracted towards the light in evening and are drowned in water kept below the bulb. The trap remains on throughout the night and traps a large number of insects which could otherwise damage the crop. Being solar based, it is energy efficient device



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...PROMOTION OF CLIMATE RESILIENT PRODCUTION PRACTICES

and provides an easy solution to farmers to control pest without using toxic pesticide.

The trap has been set up in plots where the crop like Chickpea, vegetables is being taken in the current Rabi season.

Besides, in order to showcase the practical advantage of resilient technology, Solidaridad has begun supporting farmers in setting up of Front Line demonstration on major crop of Wheat and Chick pea (*Cicer arietinum*). 250 such Front Line demonstration of one acre each is being set up in the current season of Rabi and farmers have been

provided with critical inputs like Seed , bio fertilizer, bio pesticide ,micronutrient , vermi-compost. Farmers are being given hands on training and demonstration on seed treatment, sowing method, land preparation as per the training calendar.



Agri input distribution for FLD Rabi, Agar Malwa Rabi demo

Online Session

AWARENESS SESSION ON IMPORTANCE OF SOY FOOD AND VEGETABLES IN WOMEN DAILY DIET

Human needs a wide range of nutrients to lead a healthy and active life. for providing these nutrients, good nutrition or proper intake of food in relation to the body's dietary needs is required. Poor nutrition can lead to reduced immunity. Increased susceptibility to diseases and reduced productivity.

Nutrition is important for everyone. However, the requirement is different for every individual may it be an infant, growing child, pregnant women and elderly people.

Protein plays a vital role as one of the major food components for providing necessary nutrition. Protein is an organic compound consisting of essential amino acid made of carbon, hydrogen, oxygen and nitrogen. The fundamental role of protein in sustaining life can be clearly understood by its function of forming the protoplasm of all cells in living beings. Protein derived from plants and animal for self-consumption helps to maintain a steady growth of body and mind. Vegetables are important for human health because of their vitamins, minerals, phytochemical compounds, and dietary fibre content. Especially antioxidant vitamins (vitamin A, vitamin C, and vitamin E) and dietary fibre content have important roles in human health. Adequate vegetable consumption can be protective from seasonal diseases such, as well as reduce risk factors leading to diseases.

The Nutrition Choupal, an online session on health and nutrition continued in the month of Oct. The event is observing an overwhelming response from the targeted community as it provides expert knowledge and information at the door-step.



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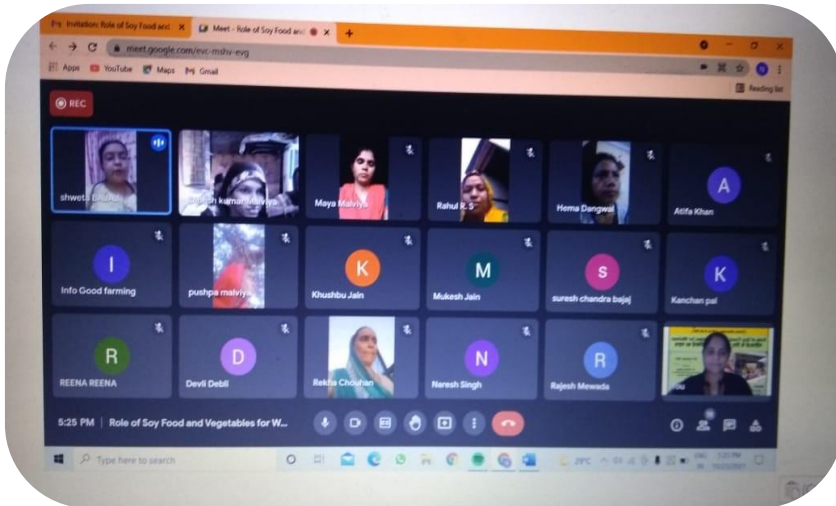




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...AWARENESS SESSION ON IMPORTANCE OF SOY FOOD AND VEGETABLES IN WOMEN DAILY DIET

The Nutrition Choupal has enabled the farmers to directly interact with health and nutrition experts to get the consultations/solution on their health and nutrition related issues and questions thereby strengthening community and expert linkages. Many of the motivated women has started adopting the inclusion of soy food in their daily diet as well as they have become aware about the importance of balanced diet and nutrition. This would contribute towards the improved dietary diversity score of targeted households.



SOLIDARIDAD, along with its partners, have organised one Nutrition Chaupal for the woman farmer, nutri sakhies (female nutrition volunteer) and paraworkers for all project district from Madhya Pradesh on 23rd Oct. The major objectives of the online training were to: Create awareness among the women farmers, nutri sakhies and para worker about the Importance of soy food and vegetables in daily diet .

Under the session, a reputed nutritional instructor -Dr. Shweta Bajaj, gave the participants a detailed account of cause and impact on women health and care and dietary practices to be adopted in daily diet.

Under the training session, the expert covered various facts about the soy, vegetables, preparation and cooking and their effects on health outcome in terms of physical and mental growth, boosting immunity and physiological functions of the body.

Products like soy flour and soy chunks and green vegetable in the daily diet are affordable and beneficial in the long run. Their nutritional value remains at the top of the chart. Many kinds of research and practical experience of its consumption have demonstrated that soybean has rich nutritional value in terms of Highest Protein content, Iron, Vitamin and minerals and in way much cheaper source of Protein than Egg and Paneer

Solidaridad seeks to promote and deepen community ownership in the programme and thereby create collective community awareness on good eating habits. Thus, nutrition becomes a focal point of its awareness approach. Similar sessions would feature under the programme in the coming future. The training sessions are themed according to the time and requirements.



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Event Celebration

WORLD FOOD DAY

World Food Day is celebrated annually on 16 October to promote global awareness and action for those who suffer from hunger, and to highlight the need to ensure healthy diets for all. The Food and Agriculture Organization of the UN (FAO) designated 16 October as World Food Day in 1979. It is observed annually to address the problem of global hunger. The day is also observed by organisations like World Food Programme and Development. It emphasises on the Sustainable Development Goal 2 (SDG 2) i.e. Zero Hunger. This year the central idea of the celebration was promotion of good production, good ecology, good nutrition and good life.



Good Farming – Good Food also encourages its associated community of Madhya Pradesh to build awareness and action for those who suffer from hunger, and to highlight the need to ensure healthy diets for all. One of the significant determinants of health is optimal nutrition from one's dietary sources. Since the body receives its nourishment from nutrients, recommended healthy food is necessary for self-consumption. Therefore, essential nutrients of a diet like carbohydrates, fats, Vitamins-Minerals and protein are necessary for everyone's diet.

The children and women in rural areas also suffer from deficiency of Vitamins and minerals which we call as hidden hunger. The prime focus of this awareness programme was to sensitize the community to make use of locally available resources which is rich source of all nutrients and vitamin. Women were given orientation on dietary sources from cereals, Pulse, Vegetables, oilseeds. Members also took part in demonstration of preparing soy based food like soy sweet, Tofu, snacks, Soy Milk, etc.



Women farmers joining awareness training and preparation of soy based snacks and tofu



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...WORLD FOOD DAY



Good Farming – Good Food and its associated partners organise world food day for the farmers of Madhya Pradesh to help them understand the importance of healthy food and self-assessment. The programme aims to create importance on healthy diet to the farming community of five operational districts with the help of its qualified nutrition team.

What we eat and how we eat has a reflective effect on our life. Food can have a lasting impact on one's life span. During the awareness programme, the participating farmers get a chance to review their healthy ,dietary pattern and compare it with the recommended food by the dieticians and nutrition specialists. They also receive exposure to a list of healthy food and its benefits.

A variety of food like soy chunks, soy milk and tofu, all derived from soybeans, are rich in protein. Green leafy vegetables are rich source of various micro and macronutrients, which are vital for the holistic development of the human body. Choice of food is thus crucial for people from rural communities who are more exposed to labour-intensive work. In most cases, the recommended healthy food consists of vitamins and minerals in varying doses. If the food is healthy and the balance of nutrition is correct, the person would receive the right amount of energy to work efficiently.

A good diet should involve all sorts of vegetables, fruits and grains, properly cooked and served with fibre rich salads. Also, when doing self-assessment, under-nourishment or over-feeding of dietary intake should be looked after. An accurate assessment is thus important for everyone in the family. Awareness on healthy consumption through gradual interventions will help many farmers rise above the nutrition's failing grades in their community. Good Farming – Good Food and its partners would continue to organise similar awareness programmes in the future.

Farmers from project districts of Madhya Pradesh came together under the banner of Good Farming – Good Food to celebrate the world food day. The activity also recognised and felicitated the farmers who successfully applied good healthy practices in their daily routines. Along the lines of sustainable farming and prosperity, Good Farming – Good Food, progresses with its partners and encourages to organise such types of occasions.



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FPO UPDATE

The availability of quality and high-yielding varieties of soy seeds is one of the key issues which affects the yield and income of farmers. The project good farming good food is promoting new and improved seeds and its multiplication with the engagement of FPOs. The multiplication of quality seeds would ensure sufficient availability of quality raw material for producing qualitative soy food products.

In district Dewas, Diwasa Producer Company was registered on 2nd September, 2020 under the companies act of 1956 Part IX A. After the registration of FPO, the board members have mobilized 350 shareholders with the support of Solidaridad. The FPO generates Rs 3, 50,000/- as share capital. To start with the available capital, FPO have started small business initiatives and have demonstrated the successful models on small scale business activities around aggregation of quality seeds, packaging materials and custom hiring center. They are planning to expand their business in trading of commodities like soybean, wheat and chick-pea.



The visit of representative from Confederation of Indian Industries (CII)



An interface meeting was organized between the industry representative of Confederation of Indian Industries (CII) and BoD members of Ajivika Orange Producer Company Ltd on 12th October at Ajivika resource cum Training Centre, Agar Malwa, one of the project district. The CII has formed a task force with mandate to explore areas where new and emerging FPO require support to strengthen its marketing system, collectivization and primary processing ability. The members of BoDs took active part in the discussion and expressed the area where such support is required like grading machine, warehouse unit, waxing unit, crates etc for Oranges to achieve the desired market price. The members also shared the existing cropping pattern, crop cycle and marketing channel in Agar Malwa, constraints being faced on production.

The month of October was found to be quite engaging for farmers and FPO like Samarth Kisan Producer Company who is in to production and sale of quality seed under the brand name Samarth seed. The company is providing seed of HYVs of Wheat like Pusa Anmol, Pusa, Purna, Pusa Tejas, Pusa Mangal, and Lok1. Similarly in case of Gram HYVs seed like RVG-202, JG-12 is being made available to farmers. Solidaridad and its front line team is providing necessary knowledge and information to farmers about the basic quality and characteristics of the variety so as to enable them chose right variety keeping in view the available irrigation, soil condition, crop duration, sowing timing and yield expectation. Availability of quality seed with climate adaptability is key for





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...FPO UPDATE

successful crop production which is in core of our initiative to support farmers and FPO. More than 300 farmers have also registered themselves with Rabi Seed Production programme of Wheat and Gram which has been facilitated by Solidaridad front line team.

Under the banner of Good Farming – Good Food, Solidaridad constantly provides support in the documentation and logistics like registration, procurement, MSP, weighing, storage in the target areas etc. Under the correct and perceptive guidance, many other FPOs are likely to come up soon. Good Farming – Good Food aspires to guide all budding FPOs into sustainable organizations.

TRAINING OF TRAINERS (TOT) FOR RURAL ENTERPRENUER

Solidaridad has been consistently supporting the Rural Entrepreneurs (RE), who are the first line of extension functionary, working as a link between Farmer Produce Company and the farmers for providing agri-business services and advisory role. Solidaridad has organized trainings on various topics of good agricultural practices.

Solidaridad facilitated in organizing this interface meeting in the month of Oct with active service provider cum rural Entrepreneurs on Rabi production plan and marketing in all project district. The young and motivated entrepreneurs were given detailed orientation on current business planning of Rabi season, area for seed production, production target of wheat and gram. Some of the key service providers have also been provided with grain moisture meter



which is to be used for determination of grain moisture of Soybean so as to advise farmers on drying needs to meet market needs and also safe storage.

One BBF planter and One Multi crop Grading machine has been provided at the one of the project district Agar, which would be used on custom hiring basis under the motivated Rural entrepreneurs. The same is planned to be distributed in all the district in coming month. It will help and motivate more number of farmers to go for BBF (Broad Bed and Furrow) planting in Chickpea and also obtain quality grain through use of multi grain grader machine which would help farmers do primary processing and segregate the quality grain before taking to market and fetch premium price.

Similarly, the entrepreneurs would receive a chance to explore new opportunities in agriculture and its scientific enquiries.



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AWARD

The Soybean Processors Association of India (SOPA) organized two days International Soy Conclave, 09 – 10 October, 2021 at Brilliant Convention Centre, Indore. The team Solidaridad participated in the event with many other stakeholders from all over country. The major objectives of conclave to provide a platform for interaction, networking and knowledge sharing.



Solidaridad so honored and grateful to be the recipient a special award for significant contribution to sustainable in soybean cultivation in India at International Soy Conclave, Indore.

Solidaridad has been conferred with Sustainability Award for promotion of sustainable production programme in Soybean by SOPA, and apex body of Soybean Processor Association, India. The award was received by Dr Suresh Motwani, Programme Head in an international conclave held on 9th October 2021 at Indore, India.

TEAM PLANNING AND REVIEW MEETING CULMINATED WITH DIWALI CELEBRATION



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...TEAM PLANNING AND REVIEW MEETING CULMINATED WITH DIWALI CELEBRATION

Solidaridad , organized the three days team planning and review meeting in the month of Oct from to identify tasks and activities, estimates resource requirements, assigns responsibility, schedules tasks, Understand the situation of Program execution, improvement areas, future Potentials and manages risk and review the progress of the project, list out step for corrective action , set out performance indicators individual or team performance, and evaluates the project under Programme Good Farming – Good Food.

The team members deliberated on established Road Map for next six months during the meeting and shared relevant information regarding project outcome from their respective districts.

The meeting helped participants set out plan of activities and key Project Indicators to be achieved .The members deliberated and reviewed major concern ,programme goal, objectives , progress made in past six months . Each of the members were given opportunity to present their progress against assigned task and present major accomplishment, project's status, Scope, Schedule of activity and Quality. They also discussed key issues or challenge that need strategic intervention.



Team Planing and review meeting



HAND HOLDING AND BUSINESS PLAN TRAINING FOR FARMER PRODUCER ORGANIZATIONS

Farmer Producer organization can be defined as farmers collective coming together for attainment of common goal It is collection of many such primary producer groups with elected representatives accountable to their members. It can be viewed as a hybrid of private companies and cooperative societies working in the sphere of collective agricultural improvement. Every business, small or large needs a business plan. A good Business Plan will drive to build a clear path towards the larger goal. Similarly, with Farmer Producer Organizations (FPO) being institutions owned and managed by the small and marginalized farmers needs to prepare a viable plan. An effective system of business planning in place, can guide the FPO to the destination it has envisioned and ensure a win-win situation for both the farmers as well as the FPOs.

Under the Good Farming – Good Food programme, Solidaridad and its partners organised a Hand holding and Business plan Training for Farmer Producer Organizations from 19th to 22nd October at famed Institute of Rural Management (IRMA) Anand, Gujarat.



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..HAND HOLDING AND BUSINESS PLAN TRAINING FOR FARMER PRODUCER ORGANIZATIONS

The training programme was organized for the FPOs which are registered under the Companies Act, The programme was organized for the CEOs and BODs of the Farmer Producer Organizations.



The objectives of the Training programme were: To identify and describe various components of a Business Plan, to design the process of developing a Business Plan, to apply the facilitation skills in designing the Business Plan, to analyse and infer the data to and reframe the Business Plan and to design the Business Plan for FPOs. The four days residential training was attended by twenty six members from eleven FPOs promoted by Solidaridad. The participants included members of governing body and Chief Executive officer. Two BoD members from each FPO were drafted for this training cum exposure.

The four days training schedule was started with one-to-one introduction of each participants with sharing of Farmer Producer Organisations latest status, objectives of formation of these FPO and objectives of training ,so far .Professor Rakesh Arawatiya an IRMA faculty briefed the objectives of training ,as to explain the various components of a business plan and to develop viable business plan and discussed with participants regarding their expectations from FPO.

The details session also held on challenges being faced by FPOs in operation, team building and leadership facilitated by Professor Sushant Sharma ,faculty IRMA. The session started with formation of five groups and group exercise for better understanding on team building and leadership.

Professor Ashish as IRMA faculty briefed regarding market potential and challenges with discussions and shared relevant case studies . One of the most popular movie Manthan Movies was Shown to participants to know about how AMUL cooperative was initiated. 'Amul is an Indian dairy cooperative_society, based at Anand in the Indian state of Gujarat. Formed in 1946, it is a cooperative brand managed by a cooperative body, the Gujarat Co-operative Milk Marketing Federation Ltd. , which today is jointly owned by 3.6 million (3.6 million) milk producers in Gujarat, and the apex body of 13 District Milk Unions, spread across 13,000 villages of Gujarat. Amul spurred India's White Revolution, which made the country the world's largest producer of milk and milk products.



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..HAND HOLDING AND BUSINESS PLAN TRAINING FOR FARMER PRODUCER ORGANIZATIONS

The next day started with formation of eleven separate group and each group led by one MBA interns for support in developing business plan by individual groups. The members were asked to hold in-depth group discussion covering aspects ,steps in FPO formation , member associated, capital share of members, villages covered, major commodities ,scope, nearest market ,mandi ,various stakeholders etc. .Based on the overall discussions and information gathered the management trainee would help prepare business plan and it will be finalised with the support from IRMA faculties.

During the training, the participants visited one of the cooperative dairy at Majkunwa village of Kheda district with Mr. Rajesh from IRMA team to know about cooperative ,various functions and management. The whole team also visited Amul Plant to see processing, packaging, branding of product with numerous value addition. In the training, the Vice Chancellor , Gujarat Agriculture University addressed the participants and dwelled upon climate change and its implication on agriculture .

Mr. Vinod Anad from Dhanuka Aggrotech Ltd organised an online session with participants and discussed in details on issues for FPOs. He committed to support FPOs in coming months help resolve issues faced by team.

The training session culminated with the participant's feedback. At the end everyone was given a certificate by IRMA.

The participants got the in-depth understanding and exposure to various business planning formats and received hands on experience in developing a business plan for FPO.



During discussion, BODs and CEOs expressed their satisfaction on being part of the training and reiterated their resolve to work collectively in developing realistic business plan with support of IRMA . They also expressed their happiness on being associated with Solidaridad which is consistently providing handholding support for their sustainability. The

participants also appreciated team Solidaridad and IRMA faculty for the support by way of mentoring and guiding them in areas of financial management, market linkage and exploring new avenues of business development. Over the year, with the innovative and advance technologies enabling the agriculture, farmers have closely mentored for smart farming and many of them have even started adopting them.

In view of this, working towards enhancement of the income of farmer is one of the key aspects of the



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organisation and presently focus is to double the income of farmer in upcoming years. Solidaridad is doing intensive efforts to farmers get optimum returns on sustainable basis.

Success Story

INSPIRING STORY OF PROGRESSIVE FARMER MR. MEHERBAN SINGH



Mr. Meharban Singh Son of Mr Bhagwan Singh, a progressive farmer from the village Rampur Gundwas of Agar Malwa District is a regular practising farmer. He has eleven family members at his home. He has five hectare of total land holding. He mainly grows soybean in his field during Kharif season. By dint of perseverance hard working, intelligent farm planning and management, ably supported by trainings under Good Farming Good Food. His education background is 9th standard only. Mr. Singh associated with the Solidaridad for past five years and since then he never looked back. Mr. Singh actively participated in all the meetings and training organized by the

Solidaridad under Good Farming Good Project and never missed any opportunity. He is very much happy to share that he has adopted the smart agriculture farming as advised by the team Solidaridad and adopted all the good agriculture practices in his one-acre demo plot with used RVS 2000... of soybean variety.

As recommended by team Solidaridad, Mr. Singh applied the seed rate in demo plot from 30 kg to 35 kg and maintain spacing of 14 inches from row to row in soybean crop. He used dora and kulpha (intercultural operation for soil inversion and weed control) for weed management followed by manual weeding at 20 Days and 40 Days after Sowing which is critical period for crop weed competition.



Mr. Singh used pheromone traps, yellow traps, bird perches (T shaped Knot) as suggested by team for pest control. He visited regular in his field and monitored crop properly and adopted all application suggested by team Solidaridad. He shared "I sprayed insecticide on earlier stage to prevent insect on time. I adopted appropriate seed rate for my field on the basis of germination test prior to sowing and applied fungicides and Rhizobium (biofertilizer) for seed treatment. I prepared the botanical bio pesticide like Dashparni, Neem Oil etc and applied for pest management. He adopts proper harvesting method in Soybean when the plant leaves and Pods turn to yellow /brown color and the grain changes its color to golden yellow and hard shape as recommended and applied all recommended post-harvest practices in proper way. Because of all these good agriculture practices the outcome is that he got good fruiting and healthy crop without any issues despite adverse climatic situation, although the adjoining control plot is seen with less fruiting and affected with other issue due to variability in rainfall receipt." **The average yield of his demo plot was with an estimated yield of 780kg/acre in comparison of 560 kg/acre in control plot, implying a yield advantage of 39%.**



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Mr. Singh is determined to scale up the replication of good agriculture practices in other crops as well. Today He is the pride owner of five hectare of agricultural land. He constantly enhances knowledge by following the farming innovations suggested by the team Solidaridad under Good Farming Good Food project. He is taking proactive initiative to spread the awareness about GAPs among other farmers as well.” It feels happy to reap the benefits of hard work and innovation,” he says. The success story of Mr. Meherban Singh is an eye-opener to the other and a source of inspiration for adopting farming as a means of livelihood.

Recipe Section

Soya Aata Mathri



Ingredients

- 100 gm Soyabean
- 100 Gm wheat flour
- 18 ml oil
- Methi, Til, Ajwain, Dry spices

Steps

- Crush Soyabean in mixer, Knead aata with Soyabean flour, wheat flour, salt, red chili powder, turmeric, finely chopped methi, and 10 ml oil.
- Roll and cut in any shape you want, I tried to make it in a little thick traditional Mathri.
- Quote with 4 ml oil with a brush, roll into til coating and Airfry for 12 minutes at 180 degrees.
- Let it dry out for a couple of minutes. Crispy methi mathri is ready.

Nutritional Value

PROTEIN	FAT	CARBS
64gm	18gm	102gm

