



YPARD

Cafe

PROGRAM REPORT- 2018

CLIMATE SMART AGRICULTURE



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Introduction

Young professional for Agricultural Development (YPARD) Nepal is an international network for empowering young people toward the development of agriculture sector. It is more than 10 years now empowering thousands of young leader in agriculture sector through networking and guiding young agriculture professionals with best solution for shaping sustainable food systems.

Change in Climate pretending global food security due to decrease in agriculture productive. Climate has been changing and its evidence are vividly visible. Some of them include, change in weather pattern, rising in sea level and shifting of cultivation practices stimulating daily activities of farmer. According to Food and Agriculture Organization (FAO), climate change threatens our ability to ensure global food security, eradicate poverty and achieve sustainable development. Greenhouse gas (GHG) emissions from human activity and livestock are a significant driver of climate change, trapping heat in the earth's atmosphere and triggering global warming. Climate change has both direct and indirect effects on agricultural productivity including changing rainfall patterns, drought, flooding and the geographical redistribution of pests and diseases.

This dire situation needs enthusiastic mitigation efforts from today's youths. Mentoring these youths to aware them about climate smart agriculture is utmost necessity. Realizing this necessity, YPARD Nepal set a creative platform named YPARD Cafe; an information sharing and discussion forum, on 26th August, 2018 at Agriculture and Forestry University, Rampur, Chitwan, Nepal. Analytically selected 20 undergraduate students of agriculture with demonstrated enthusiasm in climate smart agriculture participated in the forum. Their idea and innovative solutions were tented to positive change in sustainable agriculture for smallholder farmers in Nepalese scenario.

Based on topic recent ongoing project on climate smart agriculture in Nepal followed by some video presentation was done by Mr. Abhishek Khadka, Country Representative of YPARD Nepal. According to him, climate is changing and it has been devastating agriculture crop which soon is going to be the most serious challenge for the future farmer in Nepal. Nepal is one the most vulnerable (rank 4th) country to climate change hazards which is directly affecting the livelihood of 70% smallholder farmer. Agriculture is the only source of income for geographically isolated smallholder farmer. Climate smart agriculture might be the incentive for sustainable farming and increase the productivity.

All the active and motivated youth with own visionary ideal solution to bring a solution for Climate smart agriculture in Nepal. They were good in evaluation and decision making related to climate change and smart technology for agriculture. Group discussion of talent and their oral presentation of sustainable innovative idea turn the visionary perception of YPARD Nepal team member.

Mission and Vision

Encourage and motivate youth to identify serious effect of climate change on agriculture and farmer livelihood. This cafe opened with discussions on recent problems related to climate change and ideal knowledge on smart agriculture to cooperate with innovative solution. Make talented youth to think about the challenging problem, which was world people are going to trickled for sustain their life. Encourage participants for exploring innovative idea for solving global challenge on climate smart agriculture. Make them conscious on global perspective about climate change.

YPARD engaging with youth and motivating them to proffer possible solutions to the current problems. We are trying to solve the climate vulnerable area of Nepal with smart idea and technology in agriculture to sustain the crop yield. Exploring the knowledge and gathering the innovative idea that sustain the agriculture production. Overall, we are penetrating unconscious mind of youth to generate sustainable idea that can implement on agriculture development.

Hindering the climate change problem with the effortless help from active youth to secure the food problem. YPARD cafe trying to enable and empowered young agricultural leaders for shaping sustainable food system through teamwork development to sharing idea, vison, and harness diverse opinion.

Goal

YPARD cafe is to gather the creative and innovative youth to discuss on relevant topic which was global problem in current period. This cafe developed a sustainable solution to fit on discuss topic. Making the youth aware on such issue to compete for the global problem. Ultimately, the YPARD cafe is a short discussion and informative season for bringing the innovative solution in some issue.

Area of Impact

Raise awareness about current issue to the youth and geographically isolated smallholder farmer. Visualizing the innovative idea to the Government and Non-governmental organization working for sustainable development goals; fighting for food security and climate change. Expanding the knowledge and idea of youth into local and global scale for actable impact on development. Climate Vulnerable smallholder farmer were aware through smart farming technology to sustain their crop yield with minimum effort on prediction.

Idea Innovative Lab

YPARD cafe main purpose is to involve the sustainable idea for climate smart agriculture. One hour of group discussion among five team facilitated by YPARD member to developed a new solution for current discuss issue.

First Team (Co-Operative Farming)

It is the best collective effort to tackle the climate change.

1. Crop livestock integrated farming
 - Provides manures which lay substitute the chemical fertilizer for the crop.
2. Diversification of crop
 - Swapping winter rice with maize can bring massive saving water use.
 - Introduce of drought, insect/pest, and disease resistance variety
3. Expansion of Agro-forest
 - This will create microclimate to conserve the water and growth of plant.

Second Team (Farmer initiative for smart Agriculture)

Improvement of farming, fisheries and forestry with climate smart agriculture. Change in cropping pattern and land use conversion to mitigate current climate risk. Analysis of knowledge of farmers and start best agriculture practices from grassroots with the support of co-operatives and farmers group in Farmer field school. General knowledge about basic inputs i.e. drought tolerant seed variety, Off season farming, time of planting, etc. along with resource conserving Agri-practices like: Direct seeded rice, System of rice intensification , drip irrigation, rain water harvesting, etc. for water conservation.

Energy smart practices

- Use of renewable and easy decompose resources.
- Solar pumping for water distribution.
- Permaculture, home gardening, rooftop farming, kitchen gardening, etc. for conservation of house waste.

Third Team (Local awareness for Climate smart agriculture)

Awareness to the local farmer about the new technology practices for adaptation of climate smart agriculture. Intensify the information to the village farmer about best technology i.e. Mulching, zero tillage or mini tillage, seed cum fertilizer drill machine, combine harvester, drip irrigation, etc. which may reduce the carbon emission and sustainable increase in crop productivity. Farmer need to be expert in Integrated management of soil and plant pest or disease to be conserve agro-ecosystem.

Fourth Team (Climate smart village)

Adaptation of small effort in the beginning can gradually introduce climate smart agriculture technology into practicable form to make eco-friendly environment and sustainable agriculture development. Geographically study of village and climate factor for teaching accordingly adaptation technology to the farmer. Generally, use of renewable sources, recycle, reuse resource to make environment friendly village. Establishment of farmer problem discussion forum weekly in a village to understand their problem and practicable solution. Building a village into agriculture point of view to setup into agri-tourism village through which information flow to the visitor who could know and recognize the problem.

“First recognize, realize, and act something big”

Fifth Team (Biochar hands on training to farmer)

To improve the productivity of farmer, maintain soil moisture status, and reduce the greenhouse gases by adoption of climate resilient technology is only by the Biochar method. Visualize the benefits of Bio-char to the farmer and hands-on training on biochar use specially for the women and marginalized farmer.

Conclusion

YPARD Cafe accomplish with mission to motivate youth toward the development of agriculture in sustainable way for shaping food security system. This program emphasized the participant and smallholder farmer through communication to provide ideal solution regarding climate smart agriculture. YPARD cafe has developed youth network power to generate an innovative solution creatively for sustaining the agriculture productivity.