Introduction

The eco village development or EVD concept was developed jointly by WAFD and INSEDA as a means of helping women to cope with the change in climate leading to difficulties in livelihood, farming and overall environment in the sub Himalayan regions of Uttarakhand. Women’s burden was increasing not only in farming but also in fetching water from distances as water tables were going down and springs drying up, fetching fodder for animals apart from regular work. The burden was increasing as men were leaving the villages and the homes became women headed homes in the absence of the men. In short, EVD is an integrated approach for development, for communities specially women through interventions of affordable green technologies using local resources, organic/eco agriculture, kitchen gardens and capacity building of women to decrease their drudgery and improve livelihoods.
The focus of the eco village development is to adopt mitigation and adaptation practices to help women and communities as well as to focus on low carbon development activities. Through our work in 6 villages of Uttarakhand we have established an evidence base which shows that the activities of EVD can alleviate the effects of climate change on the lives of the women and communities up to a great extent. The different technologies are affordable, low carbon, user friendly, environmentally safe green technologies. These are rain roof water harvesting tanks, small solar dryers for domestic use, bamboo baskets for making organic compost, small solar poly house, and a special hybrid improved cook stove which not only eliminates smoke inside the house but also eliminates up to 80% smoke emission into the atmosphere. The special features for this are that it uses less firewood, and the waste heat in form of smoke and flue gasses warms water, it also warms the room as well as cooks two dishes at the same time. The second focus activity is organic farming and organic kitchen gardening, self-help groups for thrift and credit and organizing women into women’s groups for collective action.

There are now 350 to 400 women practicing organic farming on their small pieces of land and are able to achieve 70% food security for their families. Through kitchen gardens they are able to improve their nutrition intake by the inclusion of fresh vegetables in their diets daily. They earn a small amount by selling some of the extra produce or barter this for those things they have not grown or in need.

Now that we have an evidence base and show that the EVD concept works we would like to invite industry, women entrepreneurs dealing in organic produce, research institutions and experts to join us to take up an entire district to implement EVD in each village. With data it would give the EVD credibility so it can be put up for the government to study for inclusion of EVD as a policy.

In this context, WAFD along with ICFA and INSEDA, convened a National Round Table Conference on “Role of Women in Eco Village Development for Sustainability” on July 26, 2017 at the India International Centre, New Delhi.

The brainstorming session was chaired by Dr Shashi Singh, Chairperson, Consortium of Women Entrepreneurs of India. Ms Neerja Suneja, Director Extension, Ms Mamta Saxena, Advisor Horticulture, Ministry of Agriculture, Ms. Zareen Myles, Executive Director, WAFD along with eminent experts and prominent names from the agriculture fraternity addressed critical issues of small women farmer participants from the states of Uttarakhand, Uttar Pradesh, Haryana, Punjab, Rajasthan and Bihar.

Dr. M.J. Khan, Chairman, ICFA, welcomed all the delegates and members and highlighted the important role of women in agriculture in different perspective and how this kind of platform was needed for a long time. He raised various issues faced by women in the male dominated society and expressed the need for change along with the changing environment and technology. In his view point, the role of women should be increased in the areas where returns can be augmented and recognized forums.
should be set up for the voice of women. Moreover, flagship schemes of government, banks and other international organizations can be effectively linked and a national level platform for policy making should be set up.

**Mrs. Zareen Myles, Executive Director, Women’s Actions for Development (WAFD),** discussed about the emergence of the concept of Eco Village Development (EVD), because of effects of climate change, such as changes in crop cycle and migration of male members of the family to city in search of livelihood, which burdened the women with farm activities. EVD is a holistic concept which focuses on doing work effectively, for example creation of ‘smokeless chimney’ linked to solar panel. For dramatic change there is need for joint efforts from entrepreneurs, researchers, scholars, governments and organizations to come together on a large scale and make an impact and hope to make it a policy recognized by the government and give it a much needed push. Eco village not only takes into consideration the farming activities but also climate change effect. The technologies promoted for the development of eco village are low cost, low carbon, environmental friendly green and affordable technology. With the initiation of the initiative of EVD by WAFD, the organization has reached six villages in Uttarakhand till now and helped the farmers, especially women to earn and decent livelihood with helping them to set up poly houses and kitchen gardens. Under this initiative, they also introduced the families with better amities at less or similar cost, such as roof top harvesting with bamboo structure, a chulha for less smoke, etc. She welcomed the women farmers from Uttarakhand who came to share about their experiences after being linked to EVD initiative of WAFD and also how they were able to overcome their problems.

**Dr Shashi Singh, Chairperson, Consortium of Women Entrepreneurs of India,** discussed about the capacity building of women especially from villages. The introduction of “M”of MSME, which stands for Micro is to promote women as about 99% of women are from unorganized sector i.e. they are not recognized. Every woman can be an entrepreneur in some or other sense. There are different modules of entrepreneurship and each module needs assessment based approach as there is need to bring on broad scale of entrepreneurship. Rather than forcing women to undertake a particular task, they should be given freedom to decide for themselves and provide them with the required skills, tools and technology for the same along with making them understand the current market demand. Moreover, the need of the hour is quality, certification, branding and marketing and most importantly appropriate use of Intellectual Property Rights. Thus, women should be aware about their rights and product quality standards. This is because it plays an important role in transforming “village to smart village and smart village to smart city”. In fact, men have to be part of this movement as we all have to complement each other. It is about family development along with community development. It is not easy to move or change but society have to condition women by dissemination of information. It is building “by the women” and “for the women”.
Mrs Savita Malik, Farmer, Keet Saksharta Misson, expressed that understanding the life cycles of vegetarian and non-vegetarian insects is the key to maintaining the natural balance in crop cycles. Insects are not the enemy, but pesticides are.

Ms Neerja Suneja, Director Extension, Ministry of Agriculture, highlighted the different government initiatives and need for these schemes to reach to ground level. These schemes do not reach to middle level platform due to lack of awareness.

- National Gender Resource Centre in the Ministry of Agriculture. It works in the direction of for increasing knowledge and providing economic support along with working with UNDP to help backward regions. Under National Policy of Farmers 2007, major amendments were made especially for women like changes in definition of women in National commission of Women. She also emphasized that women should be encouraged to benefit from all the programmes and take equal participation.

- Sub-Mission on Agriculture Extension which focuses on awareness creation and enhanced use of appropriate technologies. Personnel trained under Agri-Clinics and Agri-Business Centres Scheme (ACABC) and Diploma in Agriculture Extension Services for Input Dealers (DAESI) also provides extension services to the farmers. Use of interactive and innovative methods of information dissemination like pico projectors, low cost films, handheld devices, mobile based services, Kisan Call Centers (KCCs) etc. are used and convergence is brought among extension efforts under different programmes and schemes at village level through the institution of ATMA (Agriculture Technology Management Agency) and Block Technology Teams (BTTs). One can always approach District Agricultural Officer for help besides grievance portal. For an agrarian economy it is now time to be a torch bearer for women farmers.

Ms Purnima Sahni Mohanty, Director – Corp Comm, DuPont South Asia, discussed about the projects undertaken by their organization as the Corporate Social Responsibility initiative in three themes namely: Education, Skill Development and Environment conservation which also includes health and hygiene.

Dr Shikha Chaudhry, Veterinarian, Mother Dairy, explained how they empower women in Muzzafarnagar district as they did not get fair price for their produce.

Mrs Anupama Singh, Faculty, RUDSETI, stressed on the fact that employment potential in agricultural economy appears to have reached a saturation level leading to large scale migration of manpower from rural areas to urban areas adding woes and pressure to already over strained civic infrastructure.

Ms Ranjita Sood, Director Government Affairs at Abbott Healthcare, mentioned about the production of one of their products, PediaSure, whose plant is setup in Gujarat.
Finally, the formal vote of thanks was presented by Ms. Mamta Jain, Director – Corporate Affairs, ICFA, who expressed her gratitude to all the participants for sparing their valuable time and making the discussion worthy.

The Conference ended on a happy note.

*Outcome of the meeting:*

1. Dr Nutan Kaushik Senior Fellow and area Convener TERI wants to help WAFD draw out a sustainable strategy for EVD. We have planned to meet her end of August
2. Dr PVSM Gouri Vice President Food and Organics, Round glass, has said that her organization can provide funds for a start up with the farmer ladies from EVD
3. Rujita Sood Associate Director Government Affair. Abbot Healthcare has shown interest and wants to meet us.
4. Ms. Sashi Singh Chairperson Consortium of Women Entrepreneurs of India - has also shown interest in the EVD women.

PARTICIPANTS

1. Mrs. Zareen Myles, Executive Director WAFD.
2. Mr. Raymond Myles, Secretary General, INSEDA.
3. Ms. Kavita Myles, Program Director, INSEDA.
4. Mr. Mukesh Bahuguna, Farmer, Uttarakhand (Eco Village)
5. Mrs. Nirmala Bahuguna, Farmer, Uttarakhand (Eco Village)
6. Mrs. Anita Bahuguna, Farmer, Uttarakhand (Eco Village)
7. Mrs. Pushpa Bahuguna, Farmer, Uttarakhand (Eco Village)
8. Mrs. Gayatri Devi, Farmer, Uttarakhand (Eco Village)
9. Mrs. Kidi Devi, Farmer, Uttarakhand (Eco Village)
10. Mrs. Usha Devi, Farmer, Uttarakhand (Eco Village)
11. Mrs. Krishna Bahuguna, Farmer, Uttarakhand (Eco Village)
12. Dr Shashi Singh, Chairperson, Consortium of Women Entrepreneurs of India
13. Ms Neerja Suneja, Director Extension, Ministry of Agriculture
15. Dr PVSM Gouri, Vice President Organics, Round Glass Partners
16. Dr Nutan Kaushik, Senior Fellow and Area Convener, TERI
17. Ms Uma Swaminathan, MD - RUDI Multi Trading, SEWA
18. Dr Laxmi Priya Sahoo, Scientist - Central Institute for Women in Agriculture
19. Dr Vaishali Joshi, President, Konkan Agriculture and Fisheries Research Centre
20. Dr Gurinder Randhawa, Principal Scientist Genomic Resources, ICAR
21. Dr Prem Lata Singh, Head Extension, IARI
22. Dr Monika Wason, Women Empowerment, IARI - CATAT
23. Dr Sudipta Basu, Low Cost Protected Structures, IARI
24. Dr Sumathi S, Deputy Director, Small Farmers AgriBiz Consortium
25. Ms. Purnima Sahni Mohanty, Director – Corp Comm, DuPont South Asia
26. Dr Shikha Chaudhry, Veterinarian, Mother Dairy
27. Ms Ranjita Sood, Director Govt Affairs, Abbott Healthcare
28. Ms Purnima Sahni Mohanty, Director – Corp Comm, DuPont South Asia
29. Mrs Anupama Shahi, Faculty, RUDSETI
30. Mrs Meena Singh, Entrepreneur, RUDSETI
31. Ms Poornima Savargaonkar, Author – Natueco Farming, NGO - Organic Farming
32. Ms Durga Bhure, Scholar, Vedica Scholars Program
33. Mrs Gayatri Singh, Nutritionist, DHLI
34. Mrs Vinita Thakur, Programme Executive, All India Radio - FM Gold
35. Ms Navodita Mishra, Transmission Executive, All India Radio
36. Dr Shruti S, National Partnership Officer, HUMANA
37. Ms Akanksha Goyal, HUMANA
38. Mrs Savita Malik, Farmer, Keet Saksharta Misson, + 5 Women Farmers
39. Mr Narendra Arya, Farmer – Organic Farming, Muzaffarnagar
40. Mrs Manisha Sharma, Head Milk Collection, Mother Dairy +3 Women Farmers (Diary
41. Rural Women Entrepreneurs, CWEI – 2
42. Dr MJ Khan, Chairman, ICFA
43. Ms Mamta Jain, Director – Corporate Affairs, ICFA
44. Mr Sudhanshu Arya, Vice President – Projects and Events, ICFA
45. Team ICFA – Nehal, Prerna, Ankit

More information: www.inseda.org