

**Women Empowerment for Sustaining Development**



**Seminar on  
Perspective building of women farmers on  
Participatory Varietal Selection (PVS)**

**Madurai Symposium 2019**

**Thamukkam Grounds, Madurai**

**September 20, 2019**

*Organized by*



**Rainfed Farming Development Programme  
DHAN Foundation**

*Supported by*



**LARSEN & TOUBRO**



## Background

Crop improvement or plant breeding is the art and science of changing the traits of plants to produce desired characteristics. Farmers had done crop improvement for several thousand years. After domesticating the crops, which give the food, feed, medicines, textiles, etc., of today, they have continued to modify them, and move them from continent to continent, adapting them to new climates, new cultural practices and new uses. Their selection process was unique as it involved both farmers' perspective as well as natural forces, which operated over a long period in their habitat. In the process, they created rich crop and varietal diversity. Later, with the advent of crop improvement as a science in the last two centuries, large-scale changes happened related to plant breeding. Besides natural variation, it was possible to create new variation artificially through hybridisation, mutation and other biotechnology tools. These mechanisms helped to hasten crop improvement processes. This conventional plant breeding approach was successful in increasing productivity and production of major food and commercial crops, heralding 'green revolution'. On average, around 50% of productivity increases can be attributed to genetic improvement (Fehr, 1984). With these developments, crop improvement moved from the domain of farmers to the domain of public and private organisations.

However, conventional approach of plant breeding failed to make significant impact in vast farming areas characterised by diversity in soil, weather, crops, local farmers' needs, and farming practices. Much of the progress made was limited to a few major crops. Most of the modern varieties are bred under controlled conditions (on research farms) to suit favorable growing situations, far different from the situation in the smallholder farms. This led to large difference in the performance of these materials between research stations (the selection environment) and the field of poor farmers or the marginal areas (the target environment). Further, the improved varieties are developed mostly based on breeder's perspective and not much attention is given about the specific needs of the farmers in the target production areas, especially during early phases of selection process. The varieties are tested only at final stages before their release on the farmers' fields for their suitability.

These issues gave impetus to think about participatory approach for crop improvement. Among the various crop improvement activities taken up under the broad umbrella of Participatory Crop Improvement', Participatory Varietal Selection (PVS) was one among them. PVS is a selection among varieties that do not segregate in the next generation and have stable characteristics by farmers and scientists in the farmer's fields. It is a simple way for breeders and agronomists to learn which varieties perform well on-farm and preferred by farmers. It is both a research and extension method.

DHAN Foundation has been engaged in PVS since 2011, mainly for small millet crop improvement. In the four cycles of PVS trials during 2011 to 2014, 72 local varieties, 39 released varieties and 10 pre-



release varieties of small millets were tested with the cooperation of around 1397 men and 1077 women farmers. In each site for each crop, minimum of nine to maximum of 25 varieties were tested, including the released varieties from different provinces and local varieties from the nearby areas. One to four farmers' preferred varieties were identified per crop per site. These included eight released and seven local varieties. Currently this PVS methodology is applied for other crops such as groundnut, redgram in rainfed locations like Gudiyatham. There is a vast scope for its application in other rainfed locations to improve the crop production.



Women play a crucial role in agricultural production systems, starting from sowing to storage of grains at home. Further, women farmers have rich tacit knowledge related to performance of varieties including their taste and cooking quality. To get better results from PVS trials it is critical to involve women farmers in the trials. Their perspective on PVS needs to be built for their effective participation in trials. In this background, Rainfed Farming Development Program (RFDP) of DHAN Foundation is organising a seminar for women farmers on PVS.

### About the Seminar

RFDP organizes the seminar to build the perspective of women farmers on PVS. The broad objective of the seminar is to understand and appreciate the importance of PVS for improving the crop productivity under rainfed ecosystem.

### The specific objectives are

1. To create awareness on PVS for crop productivity improvement
2. To build the capacity of women farmers and community workers for undertaking PVS for the main crops in their respective locations
3. To prepare action plan for implementing PVS for each of the location.

This seminar is organized as part of Madurai Symposium, a biennial large-scale development event organized at Madurai, Tamil Nadu by DHAN Foundation. The theme of Madurai Symposium 2019 is Women Empowerment for Sustaining Development and the seminar would contribute for improving the productivity in rainfed agriculture.

### Expected outcomes

1. Better understanding on PVS research methodology for women farmers and community workers
2. Action plan for implementing the PVS in different rainfed locations.

## Participants

Around 75 participants including women farmers, community workers DHAN staff and staff of academic institutions are expected to participate in this seminar.

Venue: Thamukkam grounds, Madurai

Date: 20th September -2019

## Program schedule

- 9.00 AM Registration
- 9.30 AM Prayer
- 9.40 AM **Welcome address** - Mr.T.Paramasivam, Project Executive, DHAN Foundation, Gudiyatham
- 10.00 AM Self introduction by the participants
- 10.15 AM **Background of the workshop** - Mr.M.Palanisamy, Program Leader, Rainfed Farming Development Programme, Madurai
- 10.30 AM **Role of PVS in crop improvement** - Dr.C.S.P.Patil, Former Dean, Collage of Forestry, Ponnampet, Karnataka
- 11.30 AM **Implementation steps in PVS** - Dr.C.S.P.Patil, Former Dean, Collage of Forestry, Ponnampet, Karnataka
- 1.00 PM Lunch
- 2.00 PM **Post PVS activities** - V.Vediyappan, Team Leader, Rainfed Farming Development Programme Madurai
- 2.30 PM **Experience on PVS** - Dr. Israel Oliver King, MSSRF, Tharamani, Chennai.
- 3.00PM **Experiences of PVS implemented locations** -
1. Mr.J.Manickam, Location in charge, Anchetty
  2. Mr. S. Mohanalingam, Project Executive, DHAN Foundation, Jawathu hills
- 3.20 PM Discussion - Questions, clarifications and suggestions
- 3.40 PM Action plan preparation and presentation
- 4.40 PM Concluding session: Way forward and feed back
- 5.00 PM Vote of thanks, National anthem

*For further information, please contact*

**M.Palanisamy and Mr.V.Vediyappan (Event Coordinators)**

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