An Introduction to Diversity Field School

Diversity field school (DFS) is a community-based action designed to create a platform for learning and sharing of crop diversity related knowledge and information.

DFS places an emphasis on agency, participation, and empowerment, and seeks to develop both the knowledge base and leadership potential of local farmers.

DFS is an innovative intervention within the community based management (CBM) paradigm particularly designed to address the perceived gap in scientific leadership in CBM. It draws from the lessons of farmer’s field school (FFS), participatory plant breeding (PPB) and CBM.

DFS adopts the models of farmers’ field school and community based management through a lens of crop genetic diversity:

1. **Venue** - Common community gathering places in the village and farmer’s fields
2. **Participants** - Interested farmers, custodian farmers, local leaders
3. **Content** - Better adaptive use of genetic diversity and crop management practices to create diversity rich solutions for improved risk management
4. **Curriculum** - Does not follow a strict curriculum, but teaches good practices in response to specific farmer needs for the management of diseases, pests and other abiotic stresses, the use of crop varietal mixtures and healthy seed production

### Desired Outcomes
Knowledge and skill outputs for community and individuals

- Advanced ability to seek scientific solutions to independently recognized issues
- An understanding of how to use agrobiodiversity to manage diseases/pests, abiotic stresses, and market stresses to increase crop production
- Improved management and use of resources from government based organizations
- An increased capacity for cross-fertilization, crop integration and co-production of diverse knowledge sets
- Improved risk management for secured livelihoods
- Multiple identified and trained local agricultural resource persons

### General DFS Process

**First:** Assess on-farm genetic crop diversity

- Understand existing diversity and knowledge, and successes and failures of past initiatives to custom fit the school program to the community
- Important tools to use: diversity fairs, four cell analysis, diversity blocks and disease damage assessment

**Second:** Increase community engagement and access to diverse sets of crops

- Link with community seed banks, National Gene Bank, and local information sources (DADO)
- Important tools to use: Focus group discussions and coordination with local stake holders

**Third:** Improve use of genetic resources, management tactics and information

- Use school program to disseminate agricultural knowledge
- Use innovative technologies to involve the youth
- Important tools to use: diversity rich solutions for managing pests, participatory variety selection, grassroots and participatory plant breeding, diversity kits and crowdsourcing data

**Fourth:** Promote use of local crop diversity

- Important tools to use: Diversity blocks, diversity fairs and community based seed production
Understanding DFS in Relationship to Other Initiatives

DFS shares traits with multiple other agricultural initiatives and to properly implement it is important to understand what sets it apart.

Definitions

*Diversity Field School (DFS)*: A platform of social learning for the use of crop genetic diversity for the management of pests, diseases and other abiotic stresses and adversities.

*Community Based Management (CBM)*: A participatory tool designed to empower local organizations to organize themselves and develop good decision making strategies, especially in reference to agricultural biodiversity and seed management.

*Farmer Field School (FFS)*: A group-based learning process to promote integrate pest management (IPM). Also works on farmer empowerment, which enables alumni to engage in a wide range of self-directed activities, including research, training, marketing and advocacy.

*Diversity Field Fores (DFF)*: A type of farmer field school which aims to boost crop yields by working with farmers to manage a diverse set of varieties and select ideal varieties for the community.

Common Principles

- Focus on empowerment and capacity building
- Use of agricultural biodiversity and advanced genetic resources
- Emphasis on local issues and farmer’s needs
- Participatory approach to learning and leadership training
- Agricultural development for food security and better livelihood

*Note:* All four initiatives involve the above principles to varying degrees

Differences

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<tr>
<th>DFS</th>
<th>CBM</th>
<th>FFS</th>
<th>DFF</th>
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<td>+Focus on the use of inter-specific diversity for managing diseases, pests and other stresses +Highly moldable to specific community +Permanent learning platform managed locally +Greater participation from women</td>
<td>+Larger, community empowerment goals (large scale) +Involvement in community fund allocation</td>
<td>+Small group of farmers for each season (small scale) +Set crop specific curriculums and training schedules that cover a wide range of topics</td>
<td>+Greater focus on participatory variety selection</td>
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