EXPERIENCES OF A JICA RESEARCH PROJECT IN ETHIOPIA: 
ENHANCING TECHNOLOGY DEVELOPMENT AND DISSEMINATION THROUGH 
FARMERS RESEARCH GROUP (FRG)

Hailu Dadi
Laboratory of Animal Genetics and Breeding, Tokyo University of Agriculture
1737 Funako, Atsugi-shi, Kanagawa 243-0034

ABSTRACT
Experiences in Ethiopia have shown that innovations/technologies that are developed on research 
stations without the participation of farmers (ultimate users) are often refused by these farmers. This is due to 
the fact that technologies which were developed without the involvement of the farmers have little chance of 
meeting the actual farmers needs. Ideally, farmers of all types would have the capacity in terms of knowledge, 
skills, attitude, information technologies and motivation to run their farming enterprise effectively. In the 
past, in general the active role of farmers in developing technologies and dissemination has been largely 
neglected and underestimated. It is in response to the problems and shortcomings of this past research 
approach that other participatory research approach such as FRG evolved in Ethiopia. The overall aim of 
establishing FRG at a given community is to effectively facilitate participatory technology development 
(PTD). Farmers Research Group acts as a focal point for on-farm observation, problem identification and 
prioritization, experimentation, analysis and monitoring and evaluation of the planned activities. Under 
this approach, there are attempts to evolve farmers in the whole process of technologies development and 
dissemination. All research efforts are also being directed towards solving the major priority problems 
identified. Working with small groups of FRG both in livestock and crops research in Ethiopia considerably 
improved communication and information exchange, empower farmers both technically and economically 
and open door for on-farm participatory research approach. Although, the performance and success of 
FRG can be affected by various factors, if FRG scenario can be managed properly it can have a significant 
contribution in research and development activities of developing countries.

KEYWORDS
Farmers Research Group (FRG), technology development, technology dissemination.
Experiences of JICA research project in Ethiopia: Enhancing agricultural technologies development and transfer through Farmers Research Group (FRG)

Hailu Dadi Melka
Tokyo University of Agriculture
PhD Student
Animal Genetics and Breeding

September 13, 2007

1. Background

Agriculture is the basis of the Ethiopian economy and plays a major role in the national socio-economic development.
- It accounts for about 50 percent of the GDP (food security, employment, foreign exchange earnings).
- An estimated 85% of the population gains its livelihood directly or indirectly from agricultural production.

Although agriculture is very important, many factors are holding back agricultural development in Ethiopia, such as:
- Unpredictable weather conditions.
- Complex social and economic conditions.
- Rapid population growth and natural resources degradation.

In order to overcome these situations and ensure economic development of agriculture, environment friendly and applicable technologies are required.

Since the establishment of agricultural research in Ethiopia, several attempts have been made to generate agricultural technologies.
- Except few successful accomplishments, there had been little success in integrating research results to farmers circumstances.

WHY?
- "Because there were few opportunities to consider socio-economic and agro-ecological circumstances of the farmers".

1. Background (Contd.)

How to improve these shortcomings of past research approach?

Alternatively, an array of participatory research approach evolved in response to these limitations, for instance:
- Participatory Technology Development (PTD)
- Client Oriented Research (COR)
- Participatory learning and action (PLA)
- Farmers field school (FFS)
- Farmers Research Group (FRG): Farmer active decision making from problem identification to utilization and transfer of results.

Background (Contd.)
2. Concept and objective of FRG-project in Ethiopia

- The basic concepts why we are working in small groups of FRGs:
  - It opens a “participatory approach” in the research system.
  - It improves communications and information exchange.
  - It empowers farmers, both technically and economically.
- The main objective of FRG is to involve farmers in technology generation, verification and transfer process.

3 Methodology
3.1 Stages in forming and operating FRG

- The process of FRG formation involves various steps which are summarized as follows:
  1. Situation analysis: assess existing scenario, define problems to be addressed, and technological options to be tested for each priority problem.
  2. Group formation: based on situation analysis groups are formed on particular problem area, training farmers.
  3. Planning: groups design experiments (methods designed to test technological options), set time frames and analyze its activities.
  4. Implementation: the group implements planned activities.
  5. Monitoring and evaluation: the group evaluate the implementation of the planned activities.
  6. Sharing results: the group shares its results with other farmers.

3.2 Composition and size of FRG

- Composition: Group of farmers who are in the same category have common interest, similar resources, vision and can easily discuss and negotiate on their social problems can form FRG.
- Size: There is no standard rule that obliges to have a certain number of members in an FRG.
  - At Adami Tulu Research Center, members vary between 18-30 farmers.
  - At Melkasa Research Center, 8 -30 farmers.
  - At present, there are 40 FRGs at both research centers.

4. Major achievements
4.1 The 1st year was given to prepare ground upon which the FRG project was established

- Much of the focus was given to:
  - Construction of FRG offices at both centers.
  - Conducting baseline survey in the project area.
  - Inception participatory workshop.
  - Procurement of office and field equipments.

4.2 Awareness level of participatory research approach increased

- Farmers, development agents and researchers awareness level increased on participatory problem identification, priority setting, planning, execution and evaluation of on-farm research.

4.3 Improved extension linkages

- Researchers-development agents-farmers and other relevant stakeholders linkage and the quality of extension services improved.
4.4 Shift in research agenda

- There is a gradual shift of research topic from conventional research focus to farmers’ problem targeted research topic.

On-farm, drought tolerant tree species identified for semi-arid conditions

4.5 Development of guideline

- There was no proper guideline that clearly indicates what procedures and methodologies to be followed while implementing the FRG approach.
- One of the success of this project until now is the development of FRG guideline in Ethiopia.

4.6 Major Publications

(a) Proceeding of a workshop
(b) Gender profile in Ethiopia (by Suzuki)

5. Challenges

- Unpredictable weather conditions (e.g. unpredictable rainfall)
- Multi-faceted (a many-sided subject) nature of farmers problems

6. Conclusion

- It is too early to provide an accurate picture of the impacts of the project, but the monitoring shows that,
  - Working with FRG facilitates participatory technology development process; make the whole technology development and transfer process financially and technically more suitable
  - FRG influences the research agendas, researches focus on solving farmers problems
  - FRG activities help to build farmers capacity to enhance self-help
  - Effective means of reaching women and the poor, who are often overlooked by formal research and extension approach

THANK YOU