Institutionalizing gender issues in agricultural technology development and transfer: the case of the Kenya Agricultural Research Institute

The Kenya Agricultural Research Institute (KARI) is a government organization under the Ministry of Research and Technology. The Institute carries out agricultural research with emphasis on developing farming technologies that will increase farmers' production and income in a sustainable manner.

KARI came into existence in 1979 as the result of a merger of a number of research institutions in Kenya under various Ministries. It now consists of 23 research centres in the various agro-ecological zones and employs 497 scientists of various disciplines and 4,620 auxiliary staff. The Institute is currently supported by a variety of funding agencies that contribute to the National Agricultural Research Project (NARP). The NARP is now in its second phase -- NARP II (1994--1999) (KARI, 1995).

Research in KARI is organized according to commodities (e.g. maize, dairy cows), factors (soil and water) and production systems (regional). Research programmes are carried out in the centres. However, these research programmes are coordinated across centres by Assistant Directors based at the headquarters in Nairobi. There are Assistant Directors for: Food Crops, Horticultural and Industrial Crops, Soil and Water Management, Range Management, Animal Production, Animal Health, Socioeconomics, Adaptive (or Regional) Research and the Agricultural Research Fund (competitive grant for inter-institutional research). At the centres, Centre Directors provide managerial support to all research programmes.

During NARP II, serious efforts have been made to incorporate extension and farmers in the process of technology development and dissemination. New tools for participatory research have been introduced and are used in all research phases. With farmers' involvement in the research cycle, it became obvious that gender issues could not be ignored. In 1995, KARI management decided that the various efforts to include gender in the research agenda needed to be harmonized. This led to the establishment of a KARI Gender Task Force (GTF) by the Director General. The composition of the Gender Task Force was to reflect all sections in KARI. Representatives from the following sections were asked to participate: Socioeconomics, Regional/Adaptive Research, Crops, Livestock and Human Resources, and Training. Representatives from NGOs (Winrock International) and KARI's major donors (The Netherlands, Great Britain, the World Bank, the European Union and the United States) were co-opted onto the GTF. Given the fact that most of the scientific staff of KARI are male, the majority of the GTF are male. The GTF has 10 members in total (four female:six male). The objective of the GTF was to identify institutional issues with respect to the integration of gender concerns within KARI and to develop strategies and a plan of action to strengthen this integration.

The starting phase

Top management at KARI and the funding agencies have always been very supportive of the activities of the Gender Task Force. This made starting the process relatively easy. Staff were made available and the team was given relative freedom to develop its activities. A reasonable degree of self-censure took place in the early days, which led to the decision to concentrate in the first instance on the issue of gender in technology development and transfer, rather than institutional issues such as staffing and terms and conditions of employment.

Since staff at KARI were not very familiar with the concept of gender, the GTF decided to first develop a programme of gender sensitization for KARI top management and researchers

in the field. In October 1995, a half-day seminar was organized with top management to allow GTF to share with them its understanding of gender issues in agricultural research and development and to seek approval for its plan of action. Most executives participated and a consensus was reached with respect to the concept of gender, which was introduced to assist in refining the definition of 'clients' and 'target groups' used in the Farming Systems Approach. The idea of holding sensitization workshops was approved, but it was recognized that the GTF would need professional assistance to execute this activity.

At the same seminar, the GTF was asked to prepare a proposal outlining all its envisaged activities, to be approved by KARI management and to be presented to potential funding agencies. This was completed in September 1996 (KARI, 1996). In this proposal, the objective of the GTF was articulated as:

to contribute to agricultural development by incorporating a gender perspective in all phases of technology development and transfer.

To achieve this objective the following activities were proposed:

- sensitization and training of KARI scientists and technical officers in gender issues;
- establishment of a literature database in the KARI library on gender issues in agricultural technology development and transfer;
- organization of a conference on gender.

Working methods and principles of the GTF

Over the four years since the GTF was established, a number of working methods and principles have developed and several observations can be made on the operations of the Gender Task Force.

Working principle 1

The GTF holds monthly meetings for which a minimum quorum of six members is required. Additional expertise can be co-opted if needed for specific tasks. Annual reports on progress and planning are sent to the Director of KARI and donors. All activities proposed by the GTF pass through the existing KARI system and procedures for the review and approval of projects.

Due to soft pressure by some members of the GTF, meetings were indeed held on a very regular basis and annual reports were presented whenever appropriate. Most donors documented the activities of the GTF in their quarterly and annual reports. KARI is at present updating and operationalizing internal Planning, Monitoring & Evaluation (PM&E) systems. The GTF is represented in this effort, to ensure that gender is an integral consideration in the new procedures for project approval and monitoring and evaluation.

Working principle 2

To harmonize the approach within KARI, all donors are informed about the Gender Task Force and its activities. Donors may provide funding for gender-related activities to be implemented through the GTF or with their knowledge. The activities are preferably multi-donor funded.

The GTF has provided a good example of a well-coordinated series of donor-funded activities within KARI. The major donors did not develop gender-related activities without the

knowledge of the GTF and most have contributed both the time of their Technical Assistants as well as funds for the execution of the activities organized by the GTF. Some smaller donors, however, did interfere with the programme and undertook gender training of KARI staff without GTF involvement. Generally, these members of staff then participated in research activities specifically for that donor.

Working principle 3

A bottom-up approach is encouraged. The GTF uses the experiences of KARI researchers in gender issues as the starting point for training and the development of gender-sensitive research activities.

A bottom-up approach has been followed in the sense that researchers were encouraged to use their own research as the starting point for gender analysis. Existing research proposals were used in the sensitization workshops to measure gender awareness. Researchers were then asked to detail the extent to which they thought their research could become more gender sensitive. Of course, not all researchers agreed that gender was necessary in research; some considered the discussion a threat to their society and culture. In the initial points of contact, it was commonly remarked that gender was a foreign concept and had nothing to do with Kenya. However, by showing the implications of the relationship between men and women in the Kenyan context, using examples from their own society and their own research, these concerns were slowly put to rest.

Working principle 4

Gender analysis is an integral part of Farming Systems analysis and is therefore not dealt with in isolation. Specific studies on gender-related issues can take place if they form a coherent component of a larger research project. Training in gender issues is linked with Participatory Rural Appraisal (PRA) activities and the Farming Systems Approach to Research, Extension and Training (FSA-RET).

The sensitization workshops use the same learning materials, terms and tools as the Farming Systems Approach introduced at KARI, but these are enriched with gender considerations.

Working principle 5

The different needs of the various actors at KARI are addressed. Research managers need to address gender issues in priority setting and resource allocation to ensure that the choices made have a bearing on the diversity of clients' needs. Biophysical scientists need to translate the technology requirements of the clients (taking gender diversity into consideration) into their project formulation, implementation and dissemination. Socioeconomists, when elaborating on the diversity of clients' needs, include gender as one of their analytical concepts.

Now that general sensitization has taken place, the GTF organizes training sessions for the various actors at KARI, such as the recently appointed Gender Advisers in the research centres, biometricians, and KARI management in the field of human resources development. Socioeconomists are encouraged to collect data in their studies in ways that permit disaggregation by gender.

The sensitization module

The GTF, in collaboration with gender training consultants, developed a training module for sensitization of researchers of various disciplines and their partners in extension. Initially, five centres were covered on a pilot basis. Three-day workshops were held, carried out by a Kenyan consultancy group, with materials prepared under the supervision of the GTF. This first phase of the project helped the GTF to improve their training materials and the training process.

In 1997, a training team was added to the Regional Research Programmes office. This team was asked to assist in a review of the module. A workshop was organized for this purpose, in which representatives from the five centres were invited to give their views on an improved version of the module. The refined objectives read as follows:

- to raise participants' awareness of their perception of the roles of men and women and the implications for their research activities and methodologies;
- to enhance participants' understanding of the concept of gender, as a way to further differentiate client categories for the purpose of targeting their needs more effectively;
- to introduce the participants to a conceptual framework that takes gender into account in the various phases of the Farming Systems Approach to Research, Extension and Training (FSA-RET);
- to develop participants' knowledge and skills in using methods and tools for gender analysis;
- to formulate strategies that will make participants' work more gender responsive. The sensitization workshops were extended to five days to include the reintroduction of a number of participatory tools that had been made more gender sensitive, as it was recognized that a considerable number of researchers had little experience with these tools.

The training focused on the use of gender-sensitive participatory tools in diagnostics, planning, experimentation and evaluation of new technologies. Tools introduced included: the activity profile, the access and control profile, and the Gender Analysis Matrix (GAM) for ex ante and ex post impact assessment. One day was devoted to fieldwork, during which the tools were applied both at household level (activity, access and control profiles, in individual interviews with men and women) and community level (e.g. mapping, trend lines, in separate male and female groups). Based on discussions with the centres, the four most representative types of household were chosen (male headed and present on the farm; male headed but absent = female managed; female headed; and extended family) to observe different gender relations in a variety of household situations. The fieldwork, although time-consuming, was highly appreciated for the insight it delivered to participants, who, more often than not, had had little previous experience in the use of participatory tools in the field. The last one and a half days were devoted to the review of existing research proposals and protocols to discover possible gender blindness and to come up with suggestions to remedy the situation.

Evaluation of the training sessions indicated that they changed the perceptions of both male and female participants with respect to gender. Fieldwork enabled participants to use the tools and gain a picture of the true situation and the diversity within it, which did not always correspond with their assumptions.

Researchers and extension staff involved in participatory research in 14 of the 23 research centres have so far been sensitized. In total, some 350 people have participated. The few centres left are mainly involved in strategic research, thus having a less urgent need for sensitization on gender issues. The sensitization workshops were facilitated by an external consultant and newly identified trainers from the pool of scientists in KARI, with support from the Assistant Director (AD) Regional Research Programmes (preparation of materials, logistics, evaluation). Care was taken to have both men and women in the team of facilitators.

In collaboration with the Food and Agriculture Organization (FAO), KARI put six officers (two male, four female) through a training of trainers course. These trainers, recently

established as Gender Advisers in the research centres, are training other potential trainers to increase the number of Gender Advisers in the institute. These Gender Advisers are permanently available at the centres, forming help desks for the scientists.

The search for literature

To improve the information base and to consolidate relevant experiences, a literature search and review of gender in agricultural technology development and transfer in Kenya was carried out in 1997/8. Organizations were contacted for mainly 'grey' literature on the subject. The organizations included KARI research centres and libraries, relevant Ministries and other national and international research institutions, foreign embassies involved in gender programmes, and various NGOs involved in technology development and dissemination. Approximately 170 titles and hard copies of documents were found. Abstracts of all relevant documents were produced and entered in the KARI database. Scientists and other interested parties can now access these abstracts and the reading materials from the KARI main library and from various centres. The Gender Advisers in the centres receive a hard copy of all abstracts and a collection of relevant books and articles.

The themes pursued in the review included: methodology, approaches and strategies; technology development and transfer; adoption studies and impact assessment; resource guides and training materials; special studies and literature reviews. The information reviewed does not cover all the selected themes equally. In the Kenyan publications, the most recurrent issues include social systems, land tenure, gender roles, and access to and control of resources. The majority of the publications focus on the situation of women but provide very little data on gender relations. An extensive series exists on training for gender and development. Publications on gender issues in technology development and dissemination mainly deal with advocacy and policy issues; very little appears to be documented concerning strategies and field experiences.

The gender conference

Given the paucity of written information on field experience of gender issues in technology development and dissemination, the GTF decided to organize a three-day gender conference in October 1998 with the following objectives:

- raising institutional awareness of gender issues and gender analysis in agricultural research within the Kenyan National Agricultural Research System (NARS) and the technology dissemination system;
- documenting experiences to date, especially those pertaining to KARI, through the presentation of case studies;
- initiating dialogue within KARI and the NARS on strategies for incorporating gender issues and gender analysis into agricultural research.

The target audience for this conference were senior managers and scientists from KARI and other national research institutions (including universities), the Ministry of Agriculture, NGOs in the field of technology dissemination, and international research centres based in Nairobi. In total, 68 people participated from the above-mentioned organizations.

In preparation for the conference, a series of 'clinics' was organized to assist scientists in preparing their case studies. A number of scientists were invited from both within and outside KARI who had experience with gender in agriculture. A professional facilitator guided the clinics. Case studies were grouped according to the stage to which they belonged in the research and dissemination (R&D) cycle. The case studies were more or less evenly spread throughout the R&D cycle. This collection of case studies has been published as conference proceedings (KARI, 1998) and have been distributed to all KARI centres and other research-

and extension-oriented organizations in Kenya as well as abroad.

Discussions on the achievements and recommendations for the way forward were developed into an action plan for the GTF for the year 1999. The main emphasis was on the implementation and consolidation of lessons learned during the sensitization training. Possible mechanisms to enhance the generation and utilization of gender information were identified and later transformed into an action plan for implementation by the GTF. The mechanisms entail developing and implementing gender-sensitive procedures for research proposal approval, assigning advisory duties in the field of gender analysis to promising and enthusiastic scientists at the research centres, specific and on-the-job training, and an improved flow of gender-related information (KARI, 1998). Some initiatives towards realization of these mechanisms have already been taken by the GTF, and these are being followed up in the 1999 annual workplan.

Monitoring and evaluation

KARI is presently discussing and updating its Planning, Monitoring and Evaluation (PM&E) system for all its research activities. Various donor projects develop and execute their own monitoring and evaluation systems, in which gender is often an important consideration.

The annual Centre Research Advisory Committee (CRAC) meeting is a reasonably harmonized system of appraisal and evaluation of research activities. The CRACs have become relatively entrenched, particularly in centres involved in adaptive and participatory research. CRAC meetings enable stakeholders (research, extension, farmers and others) to review progress made in the previous year and assess the relevance of the research and extension proposals for the following year. It is the intention of the GTF to ensure that the progress reports and new proposals are screened for gender sensitivity in preparation for these meetings. The training team has developed detailed guidelines for the inclusion of gender information in proposals and reporting, and these are introduced in the training workshops.

Thus far, the results of the 'genderization' process are not yet convincingly evident in written documents. Apparently, more intensive support and encouragement is required. It is hoped that the assistance of the Gender Advisers will lead to more visible results.

Future of the GTF

The Gender Task Force is not meant to be in existence indefinitely. Given the terms of reference, its task ends when appropriate case studies are available, institutional issues have been identified, and an implementation strategy and plan of action for further institutionalization has been made.

The preliminary thoughts on the future of gender institutionalization are that the GTF will hand over the long-term activities to the designated departments, divisions and services in KARI. The AD Training will organize the training events, with support from the AD Socioeconomics and the AD Regional Research Programmes. The literature will be updated by the AD Information and Documentation Services. Coordination will be the responsibility of one of the AD offices mentioned above.

Sustainability has to be assured by the incorporation of gender considerations in the evolving PM&E system. In the meantime, the achievements attained so far will have to be consolidated through the presence of a number of well-trained and committed staff members, general awareness in Kenyan society, and the presence and sustained interest of the funding agencies.

Lessons learned

The GTF was born out of the recognition that KARI lacked the mechanisms to include gender issues in a systematic manner in its research programmes. The set-up chosen -- involving all departments of the institute and linking gender issues to the FSA-RET, which receives much support in NARP II -- appears promising. The same applies to the inclusion of all key stakeholders (including major donors) in the same task force. This approach has shown the value of coordinated efforts among key stakeholders. The observations of the GTF often lead to discussions between donors and by KARI top management, as they relate to the overall functioning of the system.

The sensitization workshops provided important for gender-related discussions at KARI. The fact that the GTF and the training facilitators consisted of both men and women helped to overcome initial scepticism about gender. The workshops substantially changed the perceptions of participants about gender and its relevance to their work. The fieldwork also helped researchers to adapt their view of the world and to become aware of the diversity within it.

The GTF has not chosen an 'activist' approach, but has worked along the lines of practicality. The relations between men and women are analysed within the framework of farming activities rather than in terms of the equity discussion. This appears to work well, in that it draws attention to the clear inequities that exist between the sexes, thus opening the door to assessments of the potential impact on agricultural research and development.

The foundations for gender-sensitive research and development have now been laid. How gender issues will be included in the research agenda in the next phases of KARI's existence will depend to a great extent on the strength of its management to give guidance to its researchers in their work and to ensure that the monitoring tools now being developed are effectively utilized.

References

Kenya Agricultural Research Institute, *Institutionalising gender in agricultural research:* experiences from Kenya. Proceedings of the Gender Conference, 5--7 October 1998. Nairobi, KARI, 1998.

Kenya Agricultural Research Institute, *National Agricultural Research Programme: phase II project preparation report.* Nairobi, KARI, 1995.

Kenya Agricultural Research Institute, Gender Task Force, *Proposal for institutionalising gender issues in agricultural technology development and transfer: 1996--1998*. Nairobi, KARI, 1996.