



AGRICULTURAL SUPPORT SYSTEM

If farmers are to increase food production and food security, they need better access to agricultural support systems, such as credit, technology, extension services and agricultural education, as well as to the rural organizations that often channel other services. Both men and women smallholders and poor farmers have frequently been cut off from these essential agricultural support systems, which seldom take into account the different responsibilities and needs of men and women farmers. In spite of their enormous potential and their crucial roles in agricultural production, women in particular have insufficient access to production inputs and support services.

This trend underlines the need to implement measures aimed at enhancing the access of small farmers, especially women, to production inputs – particularly since the working environment of development organizations has

changed as a result of market liberalization and a reduced role for the state worldwide. National agricultural extension systems are no exception to this rule, and must respond by making internal and external adjustments. Great attention is required so that the adjustments do not become detrimental to women and men small farmers. For example, FAO's field experiences over the last decade have pointed to the need for extension programmes that are more strategically planned, needs-based, participatory and problem solving.

Women's access to and use of agricultural support systems is also severely limited by the heavy burden on time and energy that results from their triple responsibilities – productive activities (such as work in the fields), reproductive activities (such as child rearing, cooking and household chores) and community management.



Rural finance and marketing services

In order to improve production, farmers need access to financial capital. Buying seeds, fertilizer and other agricultural inputs often requires short-term loans, which are repaid when the crops are harvested. Installing major improvements, such as irrigation pumps, or acquiring new technology that increases future yields is impossible without access to long-term credit.

Smallholders, particularly women, often face difficulties in obtaining credit. This is a direct consequence of their lacking access to land, participation in development projects and extension programmes and membership in rural organizations, all of which are important channels for obtaining loans and credit information. In several countries of sub-Saharan Africa, where women and men farmers are roughly equal in number, it is estimated that women farmers receive only 10 percent of the loans granted to smallholders and less than 1 percent of the total credit advanced to the agriculture sector.

Credit delivery can be improved by setting up microfinance institutions in rural areas and reorienting the banking system to cater to the needs of small farmers, especially women. The Grameen Bank in Bangladesh, which first pioneered the microcredit approach in 1976, currently reaches more than 2 million people. Since it was founded, the bank has lent more than US\$2.1 billion, most of it in the form of loans of a few hundred dollars for small agriculture, distribution, crafts and trading enterprises. Numerous studies have shown that women are generally more reliable and punctual in repaying their loans than men are.

Men and women smallholders also suffer financially from limited access to the marketing services that would allow them to turn surplus produce into cash income. Women face particular difficulties because marketing infrastructure

planning for action

The FAO Gender and Development Plan of Action includes commitments by different Divisions of FAO to increasing the equality of access to a wide range of agricultural support systems, including markets, credit, technology, extension and training.

Rural finance and marketing services

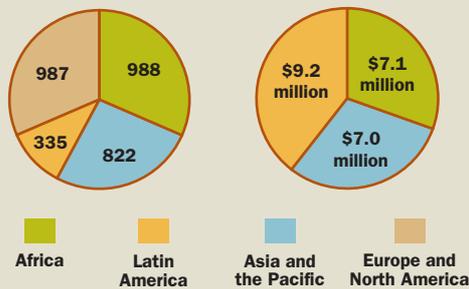
- ⊙ Under the Contribution of Livestock to Poverty Alleviation programme, target the production, processing and marketing of poultry, pigs and other short-cycled animals that are raised mainly by women, aiming specifically at enhancing women's income-generating opportunities.
- ⊙ Develop gender-sensitive guidelines and training materials for improving the business management and marketing skills of women and men farmers.

- ⊙ Collect gender-disaggregated data on the clientele of financial institutions in rural areas, and record the information in the AgriBank-Stat database.
- ⊙ Produce and disseminate information materials to promote the equitable participation of women and men in new enterprises and equitable access to support services.

Rural groups and organizations

- ⊙ Develop a technology transfer mechanism involving professional agricultural women's associations and national agricultural research and extension systems, and use it to target small-scale female entrepreneurs.
- ⊙ Promote women's broader participation as members, investors, decision-makers and users of the services of rural institutions.
- ⊙ Develop gender-sensitive training materials on a broad range of topics for institutional capacity building – small

Regional distribution of microfinance organizations and grants by members of the Consultative Group to Assist the Poor (CGAP)



Microfinance is rapidly becoming less of a South Asian phenomenon. Figures from the Microcredit Summit in 1999 showed that Africa had as many microfinance organizations as Asia and the Pacific. Members of the Consultative Group to Assist the Poor reported that the value of grants to both Africa and Latin America exceeded their in Asia and the Pacific.

source: FAO

and organizations are rarely geared towards either small-scale producers or the crops that women grow. Although women all over the world are active as traders, hawkers and street and market vendors, little has been done to improve transport and market facilities to support this vital economic sector. Even where rural women play an important role in wholesale trade, their full membership in marketing service institutions is still difficult because they may be illiterate or lack independent legal status.

group enterprise and cooperative business management and finance; local government development planning and finance; development service restructuring, decentralization and staffing – and encourage women's participation in capacity building training activities.

Agricultural research and technology

- ⊙ Focus technology transfer on specialized, income-generating opportunities in horticulture and smallholder dairy farming, sectors that are commonly dominated by women.
- ⊙ Take into account gender-specific opportunities and constraints in access to technology and techniques for improving aquaculture and inland fisheries production.
- ⊙ Promote the design and implementation of sustainable wood energy systems and the sustainable use of non-wood forest products.

— A programme providing credit and nutrition for women significantly improved both the participating women's incomes and their children's nutritional status. This is the conclusion of a study that examined the impact of a credit and education programme run by the NGO Freedom from Hunger.

Microcredit and education boost incomes and nutrition

A study examined the impact of a microcredit and educational programme implemented by the NGO Freedom from Hunger. In Ghanaian villages, women who participated in the programme used microcredit loans to launch income-generating activities such as preparing and selling palm oil, fish and cooked foods. They increased their non-farm income by \$36 per month, twice as much as the women who had not taken part in the programme. Through the programme's educational component, participating women also gained valuable knowledge about their children's nutrition and health needs.

Rural organizations

Membership of cooperatives, farmers' organizations, trade unions and other organizations represents one of the best ways for rural men and women to gain access to resources, opportunities and decision-making. Cooperatives and farmers' associations generally make it possible for farmers to share the costs and rewards of services that they could not afford on their own.

- ⊙ Focus technology transfer initiatives on women and young farmers.

Agricultural education and extension

- ⊙ Direct extension systems to consider rural women's resources and available time and to target their needs specifically.
- ⊙ Within the implementation framework of the Special Programme for Food Security, design training and extension programmes to ensure the equitable sharing of benefits and the participation of women and men farmers.
- ⊙ Use information and communication technology to improve rural women's and girls' access to education and training on the sustainable use and management of natural resources.

► RURAL ORGANIZATIONS

They can be an invaluable channel for obtaining technology, information, training and credit. They can also give smallholders a much louder voice in local and national decision-making. By instituting common food processing, storage and marketing activities, organizations can increase the exchange of goods and services and the access to national and regional markets.

Participation in such organizations can be especially important to smallholders and poor farmers, both men and women. But women are frequently deterred from joining because membership is often restricted to recognized landowners or heads of household. Even when women are responsible for the day-to-day management of both households and holdings, their husbands or other male relatives are often considered the official heads.

In many regions, women farmers' membership of these organizations is restricted by custom. Where they are able to belong to rural organizations, women often do

In recent years there has been some success in reducing the obstacles to women's participation in rural organizations. At the same time, the use and establishment of traditional and new women's groups to promote women's participation in rural development has grown rapidly. However, experience has shown that women's empowerment often requires a step-by-step process to remove the barriers to their membership in organizations that are traditionally dominated by men. Furthermore, it is necessary to give them support, individually or collectively, to enable them to gain the knowledge and self-confidence needed to make choices and take greater control of their lives.

In all regions of the developing world, women typically work far longer hours than men do. Studies in Asia and Africa show that women work as much as 13 extra hours a week. As a result, they may have little available time to seek out support services, and very different priorities for the kind of support required.

Agricultural research and technology

Overall, the agricultural research agenda has neglected the needs of smallholders, especially women farmers, and failed to take advantage of their invaluable knowledge about traditional farming methods, indigenous plant and animal varieties and coping techniques for local conditions. Such knowledge could hold the key to developing sustainable approaches that combine modern science with the fruits of centuries of experimentation and adaptation by men and women farmers.

Most research has focused on increasing the yields of commercial crops and staple grains on high-input farms, where high-yielding varieties can be cultivated under optimal conditions. Smallholders can rarely afford these technology "packages", which are also generally ill suited to the climatic and soil conditions in areas where most of the rural poor live. The crops that farmers in such areas rely on and the conditions that they face have not featured prominently in agricultural research. Sorghum and millet, for example, have received very little research attention and funding, despite their high nutritional value and ability to tolerate difficult conditions. Similarly, relatively little research has been devoted to the secondary crops grown by women, which often provide most of their family's nutritional needs.

not share equally in either the decision-making or the benefits, and are excluded from leadership positions. Furthermore, their many household chores may make it impossible for them to attend meetings and devote the time that is necessary for full participation. Investment in labour-saving technologies to relieve the burden of women's unpaid productive and reproductive tasks is needed in order to give them more free time.



— Schools where men and women farmers learn how to increase yields and reduce their reliance on pesticides by relying on natural predators.

Farmer field schools in Cambodia

In fields across Cambodia, men and women farmers gather every week to go to school. They are among the 30 000 Cambodian farmers – more than one-third of them women – who have taken part in FAO-supported farmer field schools (FFS). In the schools, farmers observe how crops develop and monitor pests throughout the growing season. They also learn how natural predators, such as wasps and spiders, can help control pests and how the heavy use of pesticides often kills them off, leaving crops even more vulnerable. These schools emphasize the active participation and empowerment of both men and women farmers. In at least six provinces in Cambodia, farmers have formed integrated pest management (IPM) groups after completing their training, and are carrying out further field studies and experiments. More than 300 farmers have completed additional training and are now organizing farmer field schools in their own areas. “I always knew pesticides were bad for my health,” one participant said, “but now I know for sure.” After completing the school, farmers rely more on cultural practices and natural enemies to control pests, and experience fewer cases of poisoning. ■

In addition, agricultural tools and implements are also rarely designed to fit women’s physical capabilities or work, so they do not meet women’s needs. The impact of new technologies is seldom evaluated from a gender perspective. The introduction of harvesting, threshing and milling machinery, for example, has very little direct effect on yields but eliminates thousands of hours of paid labour. According to one study, if all the farmers in Punjab, India, who cultivate more than 4 ha were to use combine harvesters, they would lose more than 40 million paid working days, without any increase in farm production or cropping intensity. Most of the lost labour and income would be women’s.

Developing technology to meet women’s specific needs can yield major gains in food production and food security. In Ghana, for example, technology was introduced to improve the irrigation of women’s off-season crops. Larger and more reliable harvests increased both food and economic security during the periods between major crops. In El Salvador, where women play an extremely important role in agriculture, it is estimated that as many as 60 percent of households are headed by women. One of the major goals of this country’s agriculture sector reform was to improve research and extension activities by focusing on the role of women smallholders. To address women

farmers’ needs, the project promoted women’s participation to help guide the research programme at National Agricultural Technology Centre farms.

Agricultural education and extension

Agricultural extension programmes provide farmers with a lifeline of information about new technologies, plant varieties and market opportunities. In almost all countries, however, the agricultural extension system fails to reach women farmers effectively. Among other reasons, this is because they are excluded from rural organizations. An FAO survey showed that, worldwide, female farmers receive only 5 percent of all agricultural extension services and only 15 percent of agricultural extension agents are women. In Egypt, where women make up more than half of the agricultural labour force, only 1 percent of extension officers are female.

This reflects the lack of information and understanding about the important role played by women. Extension services usually focus on commercial rather than subsistence crops, which are grown mainly by women and which are often the key to household food security. Available data rarely reflect women’s responsibility for much of the day-to-day work and decision-making on

— An FAO extension project in Honduras that focused on woman-to-woman training boosted both subsistence production and household food security.

Training Programme for Women's Incorporation in Rural Development

Several hundred peasant women in Honduras were trained to serve as "food production liaisons". After receiving their training, the liaisons worked with grassroots women's groups. They focused on impoverished rural areas where chronic malnutrition is widespread and 70 percent of all breastfeeding mothers suffer from vitamin A deficiency. Women involved with the project increased the subsistence production of nutritious foods. Credits to develop poultry production proved an effective way of increasing motivation, nutritional levels and incomes. Some of the grassroots women's groups involved with the project sought credit through extension agencies or from the Rotating Fund for Peasant Women. The credit was used to initiate other social and productive projects, including purchasing a motorized maize mill and planting soybeans for milk.

the diverse needs of men and women farmers – led to increased use of those services, by 600 percent for women and 400 percent for men.

Extension programmes that fail to take women into account also fail to address the improved technology and methods that might yield major gains in productivity and food security. Furthermore, they often schedule training times and locations that make it impossible for women to participate, in addition to existing socio-cultural reasons.

Recommended new approaches include the Strategic Extension Campaign (SEC), which was developed by FAO and introduced in Africa, the Near East, Asia and Latin America. This methodology emphasizes how important it is for field extension workers and small farmers to participate in the strategic planning, systematic management and field implementation of agricultural extension and training programmes. Its extension strategies and messages are specifically developed and tailored to the results of a participatory problem identification and needs assessment.

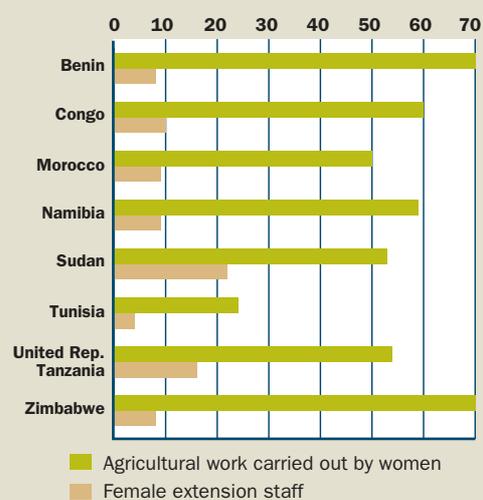
► AGRICULTURAL EDUCATION AND EXTENSION

the family farm. Nor do they recognize the many other important food production and food processing activities that women commonly perform, such as home gardening, tending livestock, gathering fuel or carrying water.

Extension programmes can be tailored to address women's priority needs only when men and women farmers are listened to at the village level and when such methods as participatory rural appraisal are employed. In recent years, a number of countries have launched determined efforts to make their extension services more responsive to women's needs. In the Gambia, for example, the proportion of female agricultural extension workers has increased from 5 percent in 1989 to more than 60 percent today. Growth in the number of female extension workers has been matched by increased attention to women's involvement and priorities. A special effort has been made to encourage women's participation in small ruminant and poultry extension services.

In Nicaragua, efforts to ensure that extension services match client needs – including giving more attention to

The percentage of agricultural work carried out by women compared with the percentage of female extension staff in selected African countries



source: FAO