

5. Closing the gender gap in agriculture and rural employment

Closing the gender gap in agriculture is not an easy task, but progress can be made and simple interventions can sometimes be very powerful. Carefully designed policies, strategies and projects can work within existing cultural norms, through the public and private sectors, in ways that benefit both women and men (Box 9). Specific recommendations for closing the gender gap in access to land, rural labour markets, financial services, social capital and technology include the steps outlined below.

Closing the gap in access to land¹⁷

Governments have long recognized the importance of secure land tenure in promoting equitable, sustainable agricultural development. Women have not always benefited from general land distribution and titling efforts, however, and in some cases have seen their customary rights eroded as formal rights have been extended to male heads of household. Many governments have attempted to strengthen women's tenure rights within marriage and as individuals, but these efforts are often frustrated by a combination of legal and cultural practices that still favour men.

In Latin America, for example, inheritance is the most frequent source of transfer of ownership of land, but daughters are much less likely than sons to inherit land. Many countries in the region have instituted legal reforms that have strengthened married women's land rights, but land-titling efforts have not always facilitated the practice of including both husbands' and wives' names. In Asia, women typically have legal rights to land ownership, but often struggle to assert

them. In the parts of sub-Saharan Africa where customary property regimes prevail, community leaders tend to favour males over females in the allocation of land, both in terms of quantity and quality. Where private property prevails, cultural norms generally dictate that men own and inherit land while women gain access to land through their relationship with a male relative.

Eliminate discrimination under the law

Where statutory legal rights to land remain gender-biased, a key strategy is to review and reform all national legislation that relates to land and natural resources. Although land laws are the starting point, related legislation should also be considered. Family and marriage laws, inheritance provisions and housing law are all important legal areas that play a supporting role in ensuring equitable treatment of men and women in control over land.¹⁸

Recognize the importance and power of customary land rights

Many countries have extended formal legal rights to women over land inheritance and ownership, but customary practices – and the inability of many women to assert their legal rights – mean that formal legal provisions are often not followed. In many countries, tradition is stronger than law when it comes to land issues. Opposition from land reform authorities, peasant unions, village authorities and male household heads can frustrate land reform efforts to extend legal land rights to both single and married women. Legal rights are difficult to enforce if they are not seen as legitimate; thus recognizing customary land rights and working with community leaders is essential to ensure that women's rights are protected.

¹⁷ This section is based on FAO (2010h), which provides an extensive review of the relevant literature. Important studies in this field include Agarwal (1994), Agarwal (2003), Lastarria-Cornhiel (1997), Deere (2003), Deere and León (2003), and Deere and Doss (2006).

¹⁸ Additional information on women and their status under the law is available at the World Bank website "Women, business and the law" (<http://wbi.worldbank.org/>).

BOX 9

Mama Lus Frut: working together for change

Palm oil production in Papua New Guinea is dominated by smallholder farmers, and harvesting oil palm trees is highly differentiated by gender: men cut fresh fruit bunches from the trees, while women collect loose fruits from the ground and carry them to the roadside where they are picked up by operators from the mill. These gender roles are firmly engrained in the local culture and institutions.

Family labour is mobilized for the harvest. While it was implicitly assumed in the past that the household head would compensate family members for their labour with the income gained from oil palm production, in reality, female household members were often not being compensated for their work. In many cases, this led to intra-household struggles and to women withdrawing their labour from loose fruit collection and focusing instead on vegetable production, which allowed them to earn, and keep, an income.

The local oil palm industry realized that between 60 and 70 percent of loose fruit were not being collected. The industry tried to raise the share of loose fruits in total harvest through several initiatives. First, they delayed the timing of loose fruit

collection to take into account women's time constraints. Then they distributed special nets that made it easier to carry the loose fruits to the roadside. Neither initiative was successful, because they did not correctly assess why women were not collecting the fruit.

Finally, the Mama Lus Frut scheme was introduced in 1997 to ensure that women received payment for their work. Women received individual harvest nets and harvest payment cards, and they received their own monthly income based on the weight of the fruit they collected, deposited directly into their personal bank accounts. As a result, the number of women participating in the scheme more than doubled and the amount of loose fruits delivered to the mills increased significantly. By 2001, 26 percent of smallholder income from oil palm was directly paid to women. Men reacted positively because the gender division of labour remained unchanged and intra-household conflicts over palm oil harvesting decreased.

Sources: Koszberski, 2001, and Warner and Bauer, 2002.

Indeed, strengthening traditional use-rights for widows and divorced women may provide more secure tenure for them even in cases where there is resistance to full ownership.

Educate officials and evaluate them on gender targets

Local land officials may be unaware of gender equity laws and objectives or lack the mechanisms, tools and will to implement them. Legislation needs to be supported by regulations and gender-specific rules and guidelines that educate officials in agriculture ministries, land institutions and other agencies regarding the implementation of the gender position of the law. Relevant training is also required for staff in the various institutions that carry out and enforce land rights, including land registries, cadastral offices, titling agencies, land magistrates

and courts. Gender-balanced employment in these institutions can also help. Where appropriate, officials' performance should be evaluated against gender-related targets. The involvement of women's organizations in the process can facilitate the achievement of gender equity targets. Furthermore, gender targets for access and tenure security should be monitored and officials held accountable for meeting them.

In Nicaragua the property legalization process, which the women's affairs office helped coordinate, included gender sensitization training for officials and information campaigns on the inclusion of women in the process (FAO, 2010h). This has helped raise awareness and acceptance among men and women of women's land rights, although several rounds of training were necessary.

Educate women regarding land rights

Raising women's legal literacy, increasing the dissemination and accessibility of information and establishing supporting legal services are essential in promoting gender equity in land programmes. Legal literacy means that women are aware of their legal rights and know how they can be enforced and protected. Officials responsible for implementing land programmes must actively educate both men and women regarding gender equity provisions and the possibility of joint titling, rather than treating the decision as a private matter between spouses (Ik Dahl, 2008; Brown, 2003).

Civil society organizations can be instrumental in promoting legal literacy. In Mozambique, when land legislation was integrated into literacy programmes or when non-governmental organizations (NGOs) distributed land law information repeatedly over a long time, women were more likely to know their rights to land (FAO, 2010h).

Precisely because they are so important, land tenure issues are often contentious, and women seeking to assert their rights may be subject to pressure from their families and communities. The provision of legal protections and affordable legal services are vital in this respect. Mobile legal clinics with staff trained in land issues may be a useful solution during land formalization programmes.

Ensure that women's voices are heard

Meaningful representation constitutes an important step towards helping women gain access to established rights. Women's organizations can be effective in promoting local participation, building a consensus and raising consciousness at all levels. The role played by women's organizations is especially valuable as women are generally not well represented in decision-making bodies, and they are often instrumental in pressuring for government programmes to include women as equal participants.

Rwanda provides an example of how state institutions and civil society organizations can work together to secure women's land rights. Rwanda successfully reformed its inheritance and land tenure legislation and now has among the best legal conditions for gender equity in these areas. Enactment of the new laws was made possible by the participation

of women in local government. The 2003 constitution mandates that 30 percent of all decision-making representatives be women.

Similarly, in the United Republic of Tanzania, village land councils, which settle land disputes, comprise seven members, of whom three must be female (Ik Dahl, 2008). Ethiopia's land certification process has been hailed as effective, low-cost, rapid and transparent, and gender equity goals have been advanced because land administration committees at the local level are required to have a least one female member.

In the Lao People's Democratic Republic, women were not receiving titles until the Lao Women's Union started to participate in the land-titling programme. The Union works at the national and local levels and has been active in informing both men and women about the titling process and their legal rights, as well as helping to formulate gender-sensitive procedures and train local field staff in their application.

Women must be an integral part of the implementation of land programmes. Training community members as paralegals, topographers and conflict mediators can help build community skills and increase the probability that women's concerns will be addressed.

Adjust bureaucratic procedures

Simple steps such as making space for two names on land registration forms can be a powerful tool for encouraging joint titling and protecting the rights of women within marriage. In Brazil, for example, women were guaranteed equal rights to land distributed through agrarian reform in 1988, but few women were registered as beneficiaries because the registration forms mentioned them only as dependants. The forms were changed in 2001 to include the names of both spouses as co-applicants or beneficiaries (Deere, 2003).

Rural women often lack the documents (such as birth records) required to obtain land titles, so facilitating access to such documents may be necessary. Placing photographs of owners on land certificates can reduce the likelihood of cheating and manipulation. Ethiopia's land programme, for example, requires that certificates for women bear their photographs to help ensure that they retain control over their

land. This measure has been credited with improving their security of tenure and has facilitated the renting-out of land by women (Deininger *et al.*, 2007).

Gather sex-disaggregated data for policy design and monitoring

Gathering sex-disaggregated data can help improve the design and effectiveness of land-titling programmes. In Cambodia, for example, a land-titling project conducted a social assessment before implementation, revealing useful insights into gender inequality and land ownership that were subsequently used to inform the programme implementation. The fact that 78 percent of new titles were issued in the joint names of husbands and wives testifies to project's success in ensuring the inclusion of women.

Closing the gap in rural labour markets¹⁹

For most women in developing countries labour is their key asset. Agriculture is of particular importance as a source of self- and wage-employment, especially for women (and men) who lack training or resources for employment in other sectors. Viewed in this context, agriculture also contributes to poverty alleviation. Agricultural growth generates demand for labour and adds upward pressure on real wages for unskilled labour. Both of these have positive implications for poor men and women, but especially so for the latter (see Chapter 3).

The principle that both employment and job quality matter is reflected in target 1B of MDG 1: "Achieve full and productive employment and decent work for all, including women and young people". The United Nations' "Decent Work" agenda for achieving MDG 1B promotes four objectives that include employment generation as well as social protection, enforcement of labour standards and regulations, and social dialogue.

Target women's multiple trade-offs

Perhaps the gender issue that has most relevance for labour market participation is that of time allocated to productive and

reproductive roles, which reflects social norms and child-rearing responsibilities. As noted in Box 3 (see page 14), in most rural areas women undertake most of the work related to child care, food preparation and other household responsibilities such as collecting fuel and water. Women are also heavily involved in unpaid agricultural production. When all household activities are taken into account, women generally work longer hours than men. Women face multiple trade-offs in the allocation of their time and, without policies and investment in labour-saving technologies, labour market participation is often not an option – even when the opportunities are available. Labour-saving technologies are discussed separately in the section on "Closing the technology gap" (see page 56).

Improving women's labour market participation also requires that governments create a good investment climate through strengthening property rights and providing public goods such as roads, electricity and water. Women's unequal access to assets and resources such as land limits their options for self-employment. Easier access to firewood, water and markets relaxes women's time constraints and can make an appreciable difference in their ability to participate in employment and self-employment. Women need to be involved in investment planning right from the beginning. In Peru, for example, women's direct participation in the design of a rural roads project ensured that greater priority was given to their needs. Upgrading was not restricted to roads connecting communities, but was extended to many non-motorized transport tracks used mostly by women and ignored by other road programmes. The resultant reduction in time spent obtaining food and fuel supplies enabled women to participate more in markets and fairs, and 43 percent of them reported earning higher incomes (World Bank, 2008).

Reduce gender inequalities in human capital

Women remain significantly overrepresented among the illiterate (UN, 2009). Improved access to education and better-quality education will help reduce some of the wage gap and, more importantly, allow women to diversify by widening the opportunities

¹⁹ The analysis in this section draws on Termine (2010).

available to them. In countries where agriculture is a major source of employment for women, skill building should address relevant skills and knowledge gaps and focus on extension services and vocational training. A higher probability of obtaining a job in a particular sector will also influence parents' educational choices for their children. In the Philippines, women are more likely to obtain non-farm employment than men and this partly explains the higher educational attainment of girls (Quisumbing, Estudillo and Otsuka, 2003).

Policy interventions need to focus on school enrolment for girls, health interventions such as immunization and nutritional interventions that target women's specific needs throughout their life cycle. Conditional transfer programmes (see Box 8, page 44), which are often targeted at the women in the household, have been used successfully to improve the education, health and nutrition of children and women (Quisumbing and Pandolfelli, 2010).

Capitalize on public works programmes

Informal labour is a major source of income for unskilled women in general, but especially so in times of crisis. Public works schemes can provide support to unskilled workers, including women. These are public labour-intensive infrastructure-development initiatives that provide cash or food-based payments in exchange for work. Such programmes have a number of advantages: they provide income transfers to the poor and are often designed to smooth income during "slack" or "hungry" periods of the year; they address infrastructure shortages (rural roads, irrigation, water-harvesting facilities, tree plantations, facilities for schools and health clinics); they are typically self-targeting, in view of the relatively low benefit levels and heavy physical labour requirements (Subbarao, 2003), and thus entail lower administrative costs than many other safety-net measures. They are also politically popular owing to the requirement that beneficiaries must work (Bloom, 2009), whereas generating support for direct cash transfers, particularly from middle-class voters, can be more challenging (e.g. Behrman, 2007).

The Ethiopian Productive Safety Net Programme was launched in 2005 as

part of the Ethiopian Government's food security strategy and reaches over 7 million chronically food-insecure individuals. Support for pregnant and lactating women is one important benefit for many women. At the community level, the creation of water-harvesting facilities and land rehabilitation initiatives is a positive development for both women and men. Women also gain from the programme through the change in men's attitudes towards women's work capabilities as a result of regular joint work on public works. The programme has helped increase household food consumption and contributes to the costs of providing for children's needs, including clothing and education and health-care costs (Holmes and Jones, 2010). These benefits have been particularly valuable in the case of female-headed households who, prior to the programme, had fewer alternative avenues for support.

In India, the National Rural Employment Guarantee Act (NREGA) was implemented in 2005 with the goal of improving the purchasing power of rural people. It provides a legal guarantee for 100 days of employment per year for adult members of any rural household who are willing to do unskilled manual work on public projects in return for the statutory minimum wage. It also aims to empower rural women by promoting their participation in the workforce through a quota: at least one-third of all workers who have registered and requested work under the scheme in each state must be women. Moreover, the Act stipulates the payment of equal wages for men and women. Women's status appears to be strengthened when they are employed through the programme, particularly when they have access to income through their own bank accounts. NREGA's design incorporates the provision of crèche facilities, intended as a means of enhancing women's participation, but the provision of child-care facilities remains a serious implementation challenge (Jandu, 2008; Holmes and Jones, 2010).

Strengthen women's rights and voice

The lack of voice suffered by women, especially in rural communities, is both cause and consequence of the gender differences observed in rural labour markets.

Institutional changes can help achieve decent work opportunities and economic and social empowerment through labour markets and at the same time reduce gender inequalities in the context of informal employment in agriculture. Public policies and legislation can influence public attitudes and the values that underlie gender inequalities. Government legislation is essential for guaranteeing equitable employment conditions that protect workers in both formal and casual employment, the latter being of particular relevance to women. For example, governments can support the organization of women in informal jobs. At the same time, collective bargaining and voluntary standards can be important, in conjunction with more formal legislation. Rural producer organizations and workers' unions can play a vital role in negotiating fairer and safer conditions of employment, including better product prices and wages, and in promoting gender equity and decent employment for men and women.

Nevertheless, prevailing vertical and horizontal institutional arrangements (i.e. producer organizations, cooperatives, workers' unions, outgrower schemes) are generally controlled and managed by men. There is thus a need for effective empowerment of women among the membership and leadership positions in these organizations to ensure that rural women have a stronger voice and decision-making power.²⁰ At the same time, it is necessary to promote gender sensitivity within representative bodies through the training of men and women representatives, as this does not derive automatically from women's participation. Women representatives do not always have the capacity to address issues in a gender-sensitive way, especially when gender roles are perceived as rigid or if there exists strong opposition or conflict with men's interest. Gender sensitivity training is also relevant for staff in institutions that work with women and implement gender-focused policies.

²⁰ Additional information on women's parliamentary representation is available at the website of the Inter-Parliamentary Union website (www.ipu.org).

Closing the financial services gap²¹

Women's access to financial services is conditioned by their legal, social and economic position within the community and household. Some of the interventions required to close the gender gap in access to financial services are similar to those needed for other asset categories. For example, giving women equal rights to enter into financial contracts is a crucial first step in countries where legal and customary restrictions prevent women from opening savings accounts, taking loans or buying insurance policies in their own right.

Microfinance programmes have been highly effective in overcoming the barriers faced by women in accessing formal credit markets, as discussed in Chapter 3. Considerations for improving women's access to financial services are considered below.

Promote financial literacy

Financial institutions, governments and NGOs should offer financial literacy training to ensure that women can compare products and make decisions based on a clear understanding of the characteristics and conditions of the products available (Mayoux and Hartl, 2009). Such efforts could involve steps such as disseminating information and promotion materials in places or through channels that women can access, simplifying application procedures and adapting them to women's literacy and numeracy levels, and simplifying insurance contracts and communicating their conditions using language and examples that less-literate women can easily understand.

Design products that meet the needs of women

The past few years have seen noticeable progress in extending insurance products to small producers and to rural areas. Crop

²¹ The material in this section is based on Fletschner and Kenney (2010). Important studies in this field include Berger (1989), Goetz and Gupta (1996), Pitt and Khandker (1998), Hashemi, Schuler and Riley (1996), Baydas, Meyer and Alfred (1994), Fletschner (2009), Fletschner and Carter (2008), Ashraf, Karlan and Yin (2010), Pitt, Khandker and Cartwright (2006), Holvoet (2004), Hazarika and Guha-Khasnabis (2008), Besley (1995), Boucher, Carter and Guirking (2008) and World Bank (2007a).

insurance and livestock insurance, for instance, are increasingly being offered as safety nets to farmers. Generally, however, such products are designed without due attention to gender differences, and the degree to which women access them is unclear. A notable exception to this pattern is the approach taken by BASIX, a large microfinance institution in India that offers weather insurance to women's self-help group members in drought-prone areas (Fletschner and Kenney, 2010).

A number of multilateral financial institutions and NGOs offer health insurance to women (Table 2). Illness can translate

into a major income shock for resource-poor households, and women may be particularly vulnerable because they are more likely to be assigned the role of caregiver. Illness in the family thus reduces women's ability to engage in income-generating activities and weakens their ability to influence family decisions.

Life events such as birth, death, marriage and other cultural ceremonies also constitute shocks to rural households. Most micro-insurance plans described here cover pregnancy and birth-related expenses. Some offer life and funeral insurance (Sriram, 2005; Mgobo, 2008), but informal safety nets, such as burial societies, remain important sources

TABLE 2
Selected examples of health insurance products targeted towards women

PROVIDER AND COUNTRY	BENEFICIARIES	DETAILS
Bangladesh Rural Advancement Committee (BRAC) Bangladesh	Originally BRAC members only; since 2007 open to all community members (poor rural women are policy-holders)	Year started: 2001 Members: 10 000 (as of 2004) (Matin, Imam and Ahmed, 2005) Results: 55 percent did not renew after first year; poorer households less likely to know about programme and better-off households more likely to enrol; some clients found it difficult to pay annual premium; others who did not use services but enrolled found it to be a "waste" (ibid.)
SKS Bangladesh	SKS borrowers, who are primarily women (spouse and up to two children covered)	Year started: 2007, expanded in 2009 to cover spouses (usually husbands) Members: 210 000 (as of 2008); required for all new borrowers or renewing borrowers (as of 2007) (Chen, Comfort and Bau, 2008) Results: Women aged 16–30 are heaviest users (ibid.)
Self Employed Women's Association (SEWA) India	SEWA members and non-members (women are policy-holders)	Year started: 1992 Members: 110 000 (as of 2003), two-thirds from rural areas (Ranson et al., 2006) Results: Found to reduce clients' vulnerability to shocks overall, but slow processing costly to clients; initially coverage was mandatory for all borrowers, but once it became voluntary, 80 percent dropped coverage (McCord, 2001)
SPANDANA India	Borrowers (compulsory, as part of loan product) (Sriram, 2005; CGAP, 2004)	Year started: 2003 (Sriram, 2005) Members: 84 000, including spouses (as of 2004) (CGAP, 2004). In 2007, 96.5 percent of borrowers were women (Mix Market, 2010)
Port Sudan Association for Small Enterprise Development (PASED) / Learning for Empowerment Against Poverty (LEAP) Sudan	Women NGO members (individual low-cost access to state health insurance) (Mayoux and Hartl, 2009)	Year started: 2007 (Mayoux and Hartl, 2009) Number of members: unknown
Kenya Women Finance Trust Limited (KWFT) Kenya	Medium and low-income women, with option to cover family members	Year started: 2008 Members: unknown, potentially 100 000 (total KWFT members) (Mgobo, 2008)
Zurich Financial Services and Women's World Banking (WWB) (Global)	WWB affiliates (women member MFIs)	Year started: 2009 Members: not yet known, but WWB network has 21 million members (WWB, 2010)

of income-smoothing for rural households, especially for women, who may face the loss of all assets upon a husband's death (Dercon *et al.*, 2007; Mapetla, Matobo and Setoi, 2007).

Promote a women-friendly and empowering culture

Lenders and other financial institutions should promote a gender-sensitive culture throughout their organization (World Bank, FAO and IFAD, 2009). Women should be consulted and included in discussions, decision-making, planning and provision of services. Marketing strategies, promotion and service delivery should be gender-sensitive. Bringing men into projects and groups can have positive effects on gender relations and improve the success of the project, but also risks losing the focus on women (Armendáriz and Roome, 2008).

A large body of evidence shows that lending to women helps households diversify and raise incomes and is associated with other benefits such as increased livelihood diversification, greater labour market participation, more education and better health. It does not necessarily empower women, however, if they do not control the assets that are built or increased (Garikipati, 2008).

Products designed to strengthen women's position include the Grameen Bank's loans for purchasing land or houses requiring that they be registered in women's names and the loans offered by Credit and Savings Household Enterprise in India for parents to buy assets for their daughters, enabling them to generate income, delay their marriage and have assets they can take with them when they marry (Mayoux and Hartl, 2009). Along similar lines, a host of products have been designed to benefit other women in the community indirectly (Mayoux and Hartl, 2009): for instance, loans for businesses that employ women, or for businesses that offer services such as child care that benefit other women.

Use technology and innovative delivery channels

Technological innovations such as prepaid cards and mobile phone plans to make loan payments and transfer cash make it easier for women to gain access to capital by

reducing the need to travel long distances, allowing them to sidestep social constraints that restrict women's mobility or the people with whom they can interact (Duncombe and Boateng, 2009). In another example, a bank in Malawi that hosts small-scale savings has introduced innovations that give women greater control over their income, such as the use of a biometric card that allows only the card holder to withdraw money from the account and the facility to open an account without an identity card, which many people in rural areas do not possess. The bank has successfully attracted large numbers of women to open bank accounts (Cheston 2007, cited in Quisumbing and Pandolfelli, 2010).

Financial institutions in countries such as Brazil, India, Kenya, the Philippines and South Africa have been able to reach rural customers at a lower cost by handling transactions through post offices, petrol stations and stores, and many telecommunication service providers allow their customers to make payments or transfer funds (World Bank, 2007a). These more accessible outlets can be particularly beneficial for rural women who have difficulty travelling to central business locations.

Closing the gap in social capital through women's groups

Building women's social capital can be an effective way to improve information exchange and resource distribution, to pool risks and to ensure that women's voices are heard in decision-making at all levels. Community-based organizations, including women's groups, can be an effective means of generating social capital. Functioning as production cooperatives, savings associations and marketing groups, women's groups can promote production and help women maintain control over the additional income they earn, as has been demonstrated by a project based around polyculture fish production in Bangladesh. As the project proved successful in providing additional incomes, the position of women within the household and community was also strengthened (Naved, 2000).

Achieving scale through pooling resources can help women overcome some of the constraints faced by individual farmers.

In Kenya, women farmers pooled their land parcels and organized themselves to establish savings associations and to deal with stockists and traders. In this way, they were able to solve problems experienced in acquiring access to land, credit and information (Spring, 2000). An impressive example of achieving scale is the Self Employed Women's Association (SEWA), which was founded in 1972 in Ahmedabad, India. This started as a small membership organization for poor women working in the informal sector. Today, it has more than one million members in 14 districts across India and aims at organizing groups with regard to services, access to markets and fair treatment. Its largest cooperative is the SEWA Bank, which in 2007-08 had over 300 000 accounts with about US\$16.6 million in deposits (see Box 10). Established associations and networks are not always accessible to women, as demonstrated by another example, from southwest China. Here women found it difficult to access the male-dominated system of networks relating to the formal plant-breeding system (Song

and Jiggins, 2002). Women-only groups can be an effective stepping stone to graduating into mixed-sex organizations or joining established groups.

Self-help groups have also proved to be an effective method for connecting women with financial institutions. Such groups may operate at the village level and typically require their members to meet regularly. Savings are collected from each member and either deposited in rural banks or loaned to other group members. After a group has demonstrated its capacity to repay loans, rural banks typically leverage the group's savings and provide additional capital that group members may use for agricultural purposes (World Bank, FAO and IFAD, 2009). There is evidence that working through groups can help women retain control over the loans they receive and enhance the returns to investments in women-managed enterprises (Garikipati, 2008).

While groups can be an important way of increasing women's voice, there can sometimes be an over-reliance on this mechanism. Women's groups, like any

BOX 10

India's Self Employed Women's Association (SEWA)

The main goal of the Self Employed Women's Association (SEWA) is to organize women to achieve full employment and self-reliance. In order to achieve this, SEWA sets up small self-help groups that meet monthly in members' fields, homes or community rooms. Farmers choose to join these groups to share mutual interests and concerns and to solve their problems collectively. For example, in the Sabarkantha district of Gujarat State, SEWA supported small-scale women farmers in creating a federation, the Sabarkantha Women Farmer's Association, and conducted a watershed conservation campaign in seven villages.

SEWA's facilitation approach includes capacity building provided by professional organizations. These organizations train SEWA members in managerial and leadership skills, providing training for self-organization and collective action to assist members in becoming confident

leaders. The low literacy levels of female participants are a major challenge to effective training delivery. SEWA also offers functional literacy training that is group-based and facilitated by a local trainer from the community. The training focuses on reading skills and is designed around women's specific needs.

SEWA's village resource centres help farmers, through the self-help groups, to identify the potential benefits of new technologies, evaluate their appropriateness and participate in technology development processes. The resource centres also provide farmers with good-quality inputs, market information and technical advice. SEWA's cooperatives are authorized seed distributors of the Gujarat State Seed Corporation and provide timely and reasonably priced quality seeds (up to 20 percent below local market prices). The village resource centres communicate current output

collective action process, face challenges and costs. Membership fees may exclude resource-poor women from joining, and membership criteria such as land ownership would bar landless women from becoming members. Timing and length of meetings may interfere with women's daily tasks. Building trust within newly formed groups can take a significant amount of time. Women may also not be interested in joining a group because the group does not address their main concerns. Quisumbing and Pandolfelli (2008) report results from a project in the Philippines that encouraged women to monitor a lake to assess whether or not soil conservation techniques reduced silting. Women's participation was low, however, because their main interest was in health issues. When the project started to emphasize the relationship between health and water quality, women's participation increased. Understanding the motivations for joining a group is therefore essential in ensuring group sustainability (Pandolfelli, Meinzen-Dick and Dohrn, 2008). Policy-makers and practitioners need to understand

clearly the specific issue they are trying to address in group formation, and that using existing, sometimes informal, groups and networks has proved more successful than initiating them from scratch.

Mixed-sex groups can be more effective where joint action is required, such as in natural resource management (Pandolfelli, Meinzen-Dick and Dohrn, 2008). In order for women to participate actively in mixed-sex groups, the groups must address women's problems and should be set up to allow the participation of more than one member of a household, if required (Meinzen-Dick *et al.*, 2010). Mixed groups should also allow for women's voices to be heard. A case study on Ethiopia found that meetings with only women or with an equal number of men and women increased women's willingness to voice their opinion (German and Taye 2008). The specifics of group mechanisms, such as the management of funds and sharing of benefits, and the share of women in leadership positions, will also play a significant role in encouraging women to participate.

prices to female leaders in each village cluster through regular SMS messages, thereby enabling the self-help groups to bargain for better prices for their produce.

Among the SEWA organizations that enable market access for small-scale farmers, the Rural Distribution Network (RUDI) plays a special role. RUDI acts as a link between farmers and consumers by making regularly used goods available to villagers. Grains, spices and salt from various districts are transported to a processing centre and dispatched to selling centres. In this way, RUDI provides an outlet to farmer groups and employment to saleswomen.

SEWA's approach is particularly successful because it is an integrated process. Self-help groups and SEWA are closely linked through SEWA institutions such as their microfinance and insurance agencies and their training facilities, as

well as their communication facilities such as the SEWA radio station. The SEWA approach is accountable and inclusive owing to its grassroots foundations and the effectiveness of service provision through self-help groups. SEWA is also powerful because of its internal cohesiveness and its linkages with external partners such as government departments, universities, research and development agencies, NGOs and private companies.

The 2 140 SEWA self-help groups often radically improve women's lives by increasing their income and food security and by enabling them to seize new opportunities. For example, the creation of the Sabarkantha Women Farmer's Cooperative enabled women farmers to reclaim 3 000 hectares of ravine lands in 73 villages. Incomes increased from an average of 5 000 Indian rupees (about US\$ 112) to as much as 15 000 Indian rupees a year.

The ability to organize mixed-sex groups will depend on the gender segregation within a community. In communities with a high level of gender segregation, single-sex groups may lead to more desirable outcomes for women (Pandolfelli, Meinzen-Dick and Dohrn, 2008). Sometimes, however, excluding men can generate unnecessary obstacles. A project introducing the new livelihood strategy of mud-crab production to supply hotels in Unguja Island, United Republic of Tanzania, excluded men and the resultant anger among the men added transaction and input costs as women had to rely on a small number of male fishers for seedstock and feedstuff (Coles and Mitchell, 2010). Projects that intervene within the local socio-cultural dynamics should avoid “default” options and, instead, base their interventions on the specific context and the underlying problem.



Closing the technology gap

Closing the gap in women’s access to a broad range of technologies could help free their time for more productive activities, enhancing their agricultural productivity, improving the market returns they receive and empowering them to make choices that are better for themselves and their families. Closing the technology gap requires that the necessary technologies exist to meet the priority needs of female farmers, that women are aware of their usefulness, and that they have the means to acquire them.

Develop technologies and environments that address women’s needs

Previous chapters documented that rural women work very long days balancing a variety of tasks related to crop and livestock production, wage employment, child care and additional household obligations. The latter, such as food preparation and collecting firewood and water, occupy a large amount of women’s time and limit women’s participation in more productive activities. Studies from Kenya, Uganda and the United Republic of Tanzania, for example, show that children and women in rural areas fetch water from the main water source on average four times per day and require about 25 minutes for each trip (Thompson *et al.*, 2001). Many of these tasks

could be made much less onerous and time-consuming through the adoption of simple technologies.

Water is of particular importance to rural households because it is necessary for agricultural and household chores, but men and women often have different priorities with regard to water use. Women are frequently responsible for collecting all water used domestically, i.e. drinking water, sanitation and health. The introduction of water sources in villages can significantly reduce the time spent by women and girls fetching water (IFAD, 2007). For example, the construction and rehabilitation of water sources in six rural provinces of Morocco reduced the time that women and young girls spent fetching water by 50–90 percent. Primary school attendance for girls in these provinces rose by 20 percent over a period of four years, which was partly attributed to the fact that girls spent less time fetching water (World Bank, 2003).

Water projects that meet multiple livelihood objectives and take gender issues properly into account are more likely to be sustainable (Quisumbing and Pandolfelli, 2010). In Manzvire village, Zimbabwe, for example, a borehole rehabilitation project involved men and women in the decision-making process regarding the appropriate technology and sites for new water points, and women were trained in maintaining the new water sources. Their active involvement provided women with a strong sense of ownership for the sources; for example, they established saving schemes that provided funds to buy spare parts. One of the project’s results was that four times more boreholes than targeted were rehabilitated (Katsi, 2006).

Firewood collection for cooking purposes can also occupy a large share of women’s time and is – quite literally – a heavy burden. Women in rural Senegal, for example, walk several kilometres a day carrying loads of over 20 kg of wood (Seck, 2007). Deforestation and unfavourable weather events, such as drought, can increase the time spent on firewood collection. Fuel-efficient stoves can reduce firewood requirements by 40–60 percent (FAO, 2006b), in addition to reducing indoor pollution and the time required for cooking. Locally manufactured stoves can also provide

income-earning opportunities for rural artisans. In western Kenya, for example, the introduction of the *Upesi* stove led to considerable reductions in smoke levels. Women who used the stove reported time-savings of about ten hours per month. The stove saves up to 40 percent of fuel compared with traditional three-stone fires and has a lifespan of about four years. *Upesi* stoves are produced by local women's groups, generating income-earning opportunities for rural women (Okello, 2005). Woodlots, agroforestry and improved fallows can further reduce the time spent in collecting firewood by bringing the sources of firewood closer to the home. These measures require secure tenure as well as labour inputs and investments for which benefits will only be realized after a number of years (FAO, 2006b).

Appropriate farm tools for women can also reduce drudgery and time spent in the field. Farm tools that are predominantly used in operations dominated by women, for example weeding or post-harvest activities, are often not gender-specific. In fact, technology developers often think of technologies as being gender-neutral, but on average women tend to be of lower weight and height compared with men and may not have equal muscular strength (Singh, Puna Ji Gite and Agarwal, 2006). Improved farming tools can facilitate seed-bed preparation, planting, weeding and harvesting activities. For example, a case study in Burkina Faso, Senegal, Uganda, Zambia and Zimbabwe showed that long-handle hoes could ease the burden of the work for women compared with traditional short-handle hoes, but they were not acceptable in some of the countries because standing up was associated with laziness (IFAD/FAO/FARMESA, 1998). Another study from India demonstrated that women who used a groundnut decorticator were able to decorticate about 14 times more groundnuts and used significantly less physical effort than women who decorticated groundnuts by hand. When preparing land with a new hand tool designed for making ridges for vegetable crops, women were able to double the number of rows finished in one hour (Singh, Puna Ji Gite and Agarwal, 2006). Thus, attention should be paid to developing appropriate, context-specific technologies as well as enhancing women's

access to them. Conducting baseline surveys of households and communities before new technologies are introduced may help predict how men and women will be affected by them (Quisumbing and Pandolfelli, 2010). Greater involvement of women in agricultural research and higher education could also enhance the development of female-friendly technology.

Improved crops with higher yields and better adapted to pests and diseases can also be labour-saving, by reducing the time for cropping operations. Certain crops, for example cassava and other root and tuber crops, have lower labour requirements and allow for more flexibility in cropping operations. Varieties that are harvested in seasons with low labour requirements can ease labour bottlenecks. Integrated pest management techniques can decrease labour requirements and costs for pesticide application, reduce farmer exposure to hazardous chemicals and increase yields. Conservation agriculture, or no-tillage systems, decreases the labour needed for land preparation and weeding, because the field is covered with cover crops and seeding is done directly without preparing the seedbed (FAO, 2006b). Biological nitrogen-fixation technologies to improve soil fertility, such as agroforestry innovations or grain legumes, can raise productivity and save labour.

Improve extension services

Extension services are important for diffusing technology and good practices, but reaching female farmers requires careful consideration. In some contexts, but not all, it is culturally more acceptable for female farmers to interact with female extension agents. Whether they are male or female, extension agents must be sensitive to the needs and constraints faced by their female clients. Extension services for women must consider all the roles of women; women's needs as farmers are often neglected in favour of programmes aimed at household responsibilities.

Hiring female extension agents can be an effective means of reaching female farmers. The United Republic of Tanzania, for example, raised the share of female extension agents to 30 percent in the mid-1990s, because many female farmers

indicated that “they felt freer to discuss problems with them ... and their time preferences were better met” (Due, Magayane and Temu, 1997). This preference is not universal, however, so in many cases properly trained male extension agents may be able to provide equally effective services.

Male extension agents must be sensitized to the realities of rural women and the quality of information provided to women improved. This requires careful and location-specific analysis of their situation. Cultural barriers could be overcome by organizing women in groups and possibly providing separate training for male and female farmers. Extension systems will also have to be more innovative and flexible to account for time and mobility constraints. Indeed, women farmers tend to be less mobile than their male counterparts owing to time constraints, restricted access to transportation and potential social and cultural obstacles that keep them from travelling outside their village boundaries. Women also often have seasonal workloads that can conflict with the timing of extension training programmes.

The Government of Ethiopia has endeavoured to render its extension services more gender-responsive by mandating its national and regional Bureaus of Agriculture to introduce extension services closely linked to women’s activities, to encourage women to participate in every programme and to assist women in obtaining better access to agricultural inputs (Buchy and Basaznew, 2005). Women’s involvement in farmer-to-farmer training and extension has also had positive results in Uganda (Box 11).

Scale up farmer field schools

Farmer field schools (FFS) have proved to be a participatory and effective way of empowering and transferring knowledge to women farmers. For example, women in Kenya, Uganda and the United Republic of Tanzania who participated in FFS were more likely to adopt major technologies, including improved crop varieties, livestock management and pest control techniques. In all three countries, women made up, on average, 50 percent of all FFS participants and they benefited significantly from their participation. For example, participants from female-headed households achieved

23 percent higher increases in income from livestock production than participants from male-headed households and were able to nearly double per capita agricultural income. FFS were easily accessible to women as well as to poor farmers and farmers with low literacy levels. Farmers particularly valued the participatory learning approach and the ability to do practical experiments using new technologies in the field (Davis *et al.*, 2009).

When targeting female participation in the FFS, time constraints play a significant role. A case study of FFS for integrated pest management in rice in Sri Lanka showed that they can take up to 15 half-day meetings in a single season (Tripp, Wijeratne and Piyadasa, 2005). Crop preferences or crop operations relevant to women farmers also determine the extent to which women participate. A participatory potato research initiative in Peru attracted only about 12 percent female participation because women thought of potato as a “male” crop. However, participation was as high as 60 percent in sessions dealing with planting, harvesting and evaluating potato clones because these tasks were perceived as “female” (Buck, 2001; Vasquez-Caicedo *et al.*, 2001).

FFS are sometimes criticized as being financially unsustainable because they require high initial investments and significant recurrent costs. Comparisons show that costs vary widely by country and crop, and that costs per farmer decline as project managers learn to use local training materials, replace international experts with local staff, and increase the number of participants (van den Berg and Jiggins, 2007). In order to increase the impact of FFS on women and to ensure their sustainability, it is important to train women farmers in effectively communicating learned experiences. This will enable them to become facilitators in other FFS or to communicate with non-participating farmers.

Key messages

- Gender gaps can be closed across a wide range of agricultural inputs, assets and services. Many steps are required by many different actors – governments, civil society, the private sector and individuals – but the basic principles are

BOX 11

Women in a sustainable rural livelihoods programme in Uganda¹

Women feature prominently in a sustainable rural livelihoods (SRL) programme established in 2004 in eastern Uganda's Kamuli District. The primary goals of the programme are to improve food security, nutrition and health at the household and community levels. Related goals are increased sources and levels of income, resilience to stresses and shocks, and the sustainable management of natural resources. The SRL is a collaborative programme of Iowa State University's Center for Sustainable Rural Livelihoods, Makerere University's Faculty of Agriculture and VEDCO (Volunteer Efforts for Development Concerns), a Ugandan NGO.

The programme employs a farmer-to-farmer training and extension approach to demonstrate and disseminate information on key management practices, for example: planting banana or cassava in ways that ensure productivity and control diseases, enhancing soil fertility through composting with manure, growing and utilizing nutrient-dense crops such as amaranth grain and Vitamin A-rich sweet potatoes. It also emphasizes the establishment of multiplication gardens and seed nurseries, post-harvest management and storage, improving livestock breeding and feeding, integrating nutrition and health with agriculture, farm enterprise development, marketing, and strengthening farmer groups.

Groups were formed following community meetings and were often based on existing self-help groups such as savings clubs. A large proportion of the 1 200 farm group members, leaders and

trainers are women: about 58 percent of community-based rural development extension workers, 75 percent of community nutrition and health workers, 76 percent of committee members and 71 percent of executive committee members.

In response to the training and support that they receive, the rural development extension and community nutrition and health workers provide training and outreach to farmer group members and others in their communities and well beyond. More than 2 000 other households have benefited from training and outreach services provided by these workers.

As a result of their participation in this programme, women's human capital has been enhanced through training and through experience gained in developing leadership skills, improved nutrition and health, and community-wide respect for their role as sources of valuable knowledge. In terms of social capital, they are integrally involved in farm groups and emerging marketing associations. Another key result has been a significant increase in household food security.

Innovations made through this three-way partnership in Kamuli District are now being mainstreamed in VEDCO's rural development support programme activities in nine other districts – for 25 000 smallholder farmers.

¹ Prepared by Robert Mazur, Professor of Sociology and Associate Director for Socioeconomic Development in the Center for Sustainable Rural Livelihoods, Iowa State University, USA.

the same across the board: eliminate discrimination under the law, make gender-aware policy and programming decisions, and give women greater voice in decision-making at all levels.

- Closing the gap in access to land and other agricultural assets requires, among other things, reforming laws to guarantee equal rights, educating

government officials and community leaders and holding them accountable for upholding the law and empowering women to ensure that they are aware of their rights and able to claim them.

- Women's participation in rural labour markets requires freeing women's time through labour-saving technologies and the provision of public services,

raising women's human capital through education, eliminating discriminatory employment practices, and capitalizing on public works programmes.

- Closing the gap in financial services requires legal and institutional reforms to meet the needs and constraints of women and efforts to enhance their financial literacy. Innovative delivery channels and social networks can reduce costs and make financial services more readily available to rural women.
- Improving women's access to agricultural technologies can be facilitated through participatory gender-inclusive

research and technology development programmes, the provision of gender-sensitive extension services and the scaling up of FFS.

- Women's groups and other forms of collective action can be an effective means of building social capital and addressing gender gaps in other areas as well, through reducing transactions costs, pooling risks, developing skills and building confidence. Women's groups can be a stepping stone to closing the gender gap in participation in other civil society organizations and government bodies.