**SYNOPSIS**

Field school networks, which mostly developed spontaneously, consist of informal or formal groupings of FFS groups with a common interest that draw their membership from all the FFSs within a given geographical or administrative boundary. Common interests at the network level are mainly marketing, advocacy, sharing information and experience, access to finance, and representation. From an innovation systems perspective, the role of extension and advisory services here is to assist in developing the needed capacity and linking producers to markets and service providers. Network operations are supported through subscription fees from constituent FFSs and other sources of income, such as interest on revolving funds, commissions on sales, registration fees, profits from input sales, and grants. Many networks operate a revolving loan system and therefore generate more funds to support operations and activities. Although the networks have shown themselves to be sustainable, their strength varies. Management, leadership, and organizational skills are needed to federate FFS networks. Networks are also vulnerable to individual motivation and capacity, since they are mostly managed by voluntary efforts among members and committee members. The networks that have been most successful are those with very committed, dynamic, and democratic leaders. Facilitating the formation of FFS networks should be considered in large-scale agricultural projects as a means to make a larger impact and make greater use of the social capital they generate. Lessons learned from the networks are that market information, while needed, is not obtained easily, and that network capacities for financial management, standards, and use of ICTs must be developed.

**CONTEXT**

Networks of Farmer Field Schools (FFSs) (see box 3.5 in this module’s Overview) started emerging in East Africa in 2000 as an unforeseen effect of the IFAD/FAO East African Integrated Pest and Production Management project conducted with the Government of Kenya. The FFS networks took off because farmers wished to continue with the dynamics and positive attributes generated by the first phase of the project, even without external funding. To date, at least nine FFS networks in Eastern Africa support about 2,000 FFSs with close to 50,000 direct beneficiaries. They have no support from the initial project that established the field schools but have established new partnerships and collaboration with other stakeholders.

**Definition of an FFS network**

FFS networks consist of informal or formal groupings of FFS groups with a common interest that draw their membership from all the FFSs within a given geographical or administrative boundary. Each FFS elects one representative to the higher network level. These networks offer a number of services to FFS member groups and individual farmers. The networks are characterized as FFSs clustered in an association or not-for-profit company. They usually have an elected core executive board and at least three working committees, such as finance and planning, loans, and market information service. They have a constitution, by-laws, are registered, and have a bank account. The operations are supported financially by member FFS through subscription fees, commission on bulk sales, shares, or profit from the sale of farm inputs.

**Evolution from individual groups into networks**

As the number of FFS groups in the program grew and broadened their level of operation, new challenges and issues emerged that could not be solved by individual groups. There were also increased opportunities for the FFS
to take advantage of economies of scale, necessitating more interaction and coordination. Based on these developments and exchange visits and interactions between farmers, facilitators, trainers, and project staff in Western Kenya in early 2000, FFS networks emerged. The networks were formed mainly by FFS graduates. Aside from taking advantage of the opportunities just mentioned, the graduates wanted to continue the dynamics generated by the FFS process—to build local institutions to ensure the continuation of farmer-led FFS and gain a stronger voice in expressing their demand.

The inherent attributes of the FFS approach of cultivating cohesion and a willingness to learn together while solving problems that affect them as a community help to build their social capital. Common interests at the network level are mainly marketing, advocacy, sharing information and experience, access to finance, and representation. There is therefore no conflict of interest when different FFSs come together to form the network. As a precursor to transformation, the level of empowerment and organization developed in an FFS is critical and can have a significant impact on the marginal returns of a subsistence-based farming system. This strong cohesion within and among FFS groups is one of the main factors contributing to the emergence of higher-level federations1 like the FFS networks.

**BENEFITS TO FARMERS, IMPACT, AND EXPERIENCE**

FFS network members state a range of benefits experienced by the networks. Important benefits appear to be increased voice and power and access to services and markets. Some of these benefits are especially important for women (box 3.31).

Despite the market barriers experienced by smallholders, the networks have been able to arrange collective marketing with its many advantages. The networks have assisted in identifying markets and collecting marketing information. A network-based monitoring and record system helps group members track the availability and quantity of their produce, making it possible to plan bulk sales and negotiate with buyers in advance of harvests. By selling in larger quantities, FFSs reduce transaction costs, gain bargaining power, and thus command better prices for their products. They have also been able to break or weaken manipulative relationships with market intermediaries and thereby gain access to more lucrative markets for their produce. Obtaining funds from government programs also appears to be easier for federated FFSs (box 3.32).

**Box 3.31 Gender Issues in FFSs**

FFSs have been shown to change gender relationships, mainly because they introduce a formal group structure but also because they operate under agreed group norms and rules. All issues brought to the group are accepted for discussion, so fewer subjects are off-limits. As a result, the position of women participating in FFSs has generally strengthened. In some East African communities, women dominate FFSs. Men are less interested in working in groups, although in some cases, they join at later stages of the FFS process.

*Source: Authors.*

To assist members in access to affordable inputs of reliable quality, such as seed and fertilizer, the networks have arranged bulk purchases of inputs for resale among members in smaller quantities, thus improving access and reducing costs. Many networks also operate small input kiosks at their offices.

By joining together, FFSs also gained access to technical and advisory services not normally available to individual FFSs or farmers. Government and other extension agents have been very responsive to requests for assistance by the networks, because they can reach more people.

Networking acts as a safety net and sustains the FFS process long after a given project ends. By jointly applying for/guaranteeing loans for individual members or groups and helping each other in the development of proposals, the federations have found it easier to obtain formal credit. Further, a savings fund is in place in most networks from which individual FFSs can borrow money through informal credit arrangements.

Finally, farmers appreciate the sharing of information and experience that networks facilitate. Through connections with other networks, member farmers exchange technical knowledge and new farming ideas in addition to benefitting from the social network in terms of mentoring, encouragement, and a feeling of togetherness. Farmers attribute their involvement in network activities to the social bonding and trust building taking place within the FFS. After networking and strengthening their capacity for collective action, member of FFSs have in many instances gained access to governance and policy processes, and they have also been invited by the government and other service organizations to represent farmers in official functions.
**Box 3.32 A Kenyan Federation of Field Schools Benefits from Government Programs**

As a result of becoming federated, the Kakamega FFS Network has obtained funds from government programs such as Njaa Marufuku (“ban hunger in Kenya”) and the Kenya Agricultural Productivity Project (KAPP), a World Bank-funded program. For example, the network obtained US$10,000 from the Livelihoods Diversification and Enterprise Development Fund for building marketing capacity of network leadership, developing and introducing a farming-as-a-business curriculum, establishing a marketing office that uses a blend of appropriate technology, developing links to established agricultural commodity exchanges, introducing financial diversification and the role of credit in agriculture, and teaching an agricultural planning process called “plant-to-meet-market.” The network also received 2.8 million Kenya shillings (K Sh) (US$40,000) from KAPP for coordinating marketing activities and agricultural commodity marketing. The funds were used mainly to purchase computer hardware and software, provide training in agribusiness and value chain management, and support service providers. Finally, through the network three FFS Groups obtained K Sh 120,000 (US$1,715) each for vegetable production and marketing.

*Source: Authors.*

**SUSTAINABILITY**

FFS networks ensure their sustainability in a range of ways. Financially the operations of the networks are supported by the constituent FFSs through regular contributions in the form of subscription fees. Other sources of income include interest charged on revolving funds, commissions on bulk network sales, registration fees, fines or penalties, donations and grants, shares from FFS members, and profits from sales of inputs. Many networks operate a revolving loan system and therefore generate more funds to cover operations and fund activities. Some have managed to secure donor support.

Politically and institutionally the networks can be considered independent of government and development support. The networks are fully locally grown, owned, and managed. Donor support, where involved, has provided infrastructure and education. In no case have donors supported the networks’ recurrent operations. Running of FFSs by FFS networks is one way to reduce the costs of running FFSs; FFS networks have lower operating costs owing to lower transport costs, lower overheads, and cheaper facilitators (most are farmer facilitators).

To date the networks have shown themselves to be sustainable; all are still active. Their strength varies, however. Management, leadership, and organizational skills are needed to federate FFS networks. Networks are also vulnerable to individual motivation and capacity, since they are mostly managed by voluntary efforts among members and committee members. The networks that have been most successful are those with very committed, dynamic, and democratic leaders.

Environmental sustainability is supported by using environmentally sound farming methods. FFS learning revolves around principles of integrated production and pest management, in which farmers balance the ecological and economic implications of particular practices for their farms and businesses.

**SCALING UP**

In most locations where a considerable number of FFSs have been implemented, FFS networks have spontaneously emerged. Currently FFS networks operate at different levels in many districts of East African countries (Kenya, Uganda, and Tanzania) and elsewhere in Africa (mainly Sierra Leone). Most networks have emerged in relatively high-potential (high-rainfall) areas, although some operate in semiarid and arid areas. As noted, the replication of FFSs is stimulated by FFS graduates’ wish to continue the dynamics generated by the FFS process and the recognized need to build local institutions. Through various modes of information sharing, networking is also promoted when farmers hear success stories from other places. In East Africa, the virtual network “Linking Local Learners,” which connects farmer groups and networks online, contributed to the growth and development of FFS networks.
The emergence and expansion of FFS networks has also been attributed to the “foci model”\(^2\) adopted for the establishment of FFSs in East Africa. In this model, successive FFSs are established in the immediate neighborhood of existing ones to form a cluster. This strategy has enhanced the frequency of interaction, experience sharing, and the horizontal flow of information among groups. The model also reduces the cost of implementing collective activities because the FFSs can procure inputs and market their produce in bulk. Facilitating the formation of FFS networks should be considered in large-scale agricultural projects as a means to make a larger impact and make greater use of the social capital they generate.

**LESSONS LEARNED AND ISSUES FOR WIDER APPLICATION**

Farmer Field Schools are considered “stepping stones” to networks, federations, and associations and are an effective platform for farmer organization and empowerment. These networks serve an important role for farmers both in terms of social and technical support. The probability that networks will form can be increased if projects give attention to the longer-term prospects, if farmer facilitators and FFS alumni receive follow-up support, and farmer-driven network development is encouraged.

In the case of the East African FFS networks, market information clearly was crucial for enhancing farmers’ access to markets. Market information is not always easy for rural, often illiterate farmers to obtain. Extension advisors often are uncomfortable or incapable of changing their role from providing technical messages to acting as more of an information broker. The need to rethink the role of extension and (re-)train extension agents accordingly, discussed throughout this module, is clear.

Based on needs realized and expressed by networks, there is a demand for more attention to capacity building in financial management, marketing, standards and quality, and the use of ICT tools. Much of the current extension practice is targeted at improving technical skills, not management skills.

The principle of federating upon graduation must be incorporated into the curricula of all FFSs. As FFS networks grow and take on more complex initiatives, networks will need investments to acquire and learn to use ICTs to bridge the information gap, enhance the diversification of business opportunities, and improve operational efficiency. Computer and Internet access and skills are high priorities. Revolving funds need to be developed into more sustainable and long-term investments by supporting networks in identifying viable income-generating activities.