Field schools are now widely used to enhance the knowledge and skills of small-scale farmers. But how can they be applied to horticulture in urban and peri-urban areas?

Key points

Farmer field schools are a proven approach for reducing pesticide use and improving the sustainability of yields in a variety of crops.

Adapting FFS to urban horticulture must take into account the characteristics that distinguish UPH from rural crop production.

Participation of growers in field schools may be an important first step toward formation of producer organizations.

The Farmer Field School (FFS) is a process of group-based learning originally developed by FAO in the late 1980s to promote Integrated Pest Management (IPM) in Asian rice fields. At field schools, farmers were able to deepen their knowledge of agro-ecology, particularly the relationship between insect pests and beneficial insects, and adopt practices that reduce the use of pesticides and improve the sustainability of crop yields.

Over the past two decades, the FFS approach has been adopted by development programmes for small-scale agricultural producers in Africa, Asia and Latin America. The focus of FFS has widened to cover a broad range of crops, including vegetables, cotton, cassava and cocoa, and to address issues in land preparation, nursery management, irrigation, soil conservation, variety selection and marketing.

A more recent development is the application of the FFS concept to urban and peri-urban horticulture. In fact, research on field schools in urban settings is still very limited. But evidence suggests that FFS can be effective in enhancing urban vegetable growers' skills and knowledge, and improving the quantity, quality and safety of horticultural produce, provided it takes into account characteristics that distinguish UPH, and UPH practitioners, from their rural counterparts.

Tailoring FFS to the urban environment

Vegetable growers in urban settings often have less access to agricultural support services, such as information on crop care, pest management, and market opportunities. Field schools can provide a valuable platform for urban farmers to learn from each other and from experts, and to develop their skills in horticultural practices.

Farmer field schools – the basics

A farmer field school is a season-long non-formal education programme usually conducted in producers’ own fields. Together, farmers study the development stages of their crops and related management practices. Basic features:

- A group of producers, usually numbering 25 to 30, is involved.
- The field school lasts for one cropping season, from seeding/transplanting to harvest, and may include post-harvest operations and marketing.
- Participants have regular meetings during the cropping season.
- Each meeting includes an agro-ecosystem analysis activity.
- Participants conduct a study comparing their usual cultivation practices with improved practices.
- The field school covers topics that deal with specific issues identified by participants.
- The school is guided by at least one trained facilitator, often a member of the group.
as extension and seed supply, which may be targeted mainly at rural areas. They are far more likely to be growing crops on land without permits. Some may have no previous horticultural experience at all. Even rural people newly settled in cities who practise horticulture may be unfamiliar with production constraints particular to urban areas, such as limited availability of safe water, and specific plant pests and diseases.

In addition, urban vegetable growers typically lack the social bonds that facilitate the organization of farmer field schools in rural areas, schedules that prevent them from attending meetings with other growers.

All of those constraints were highlighted by a project involving vegetable growers on the outskirts of Lima. A study undertaken as part of the CGIAR’s Urban Harvest Initiative found that the growers were responding to increased pest and disease pressure with widespread over-use of highly toxic pesticides. Contamination of lettuce, cabbage and basil was so serious that it posed a threat not only to producers and their families but to traders and consumers.

Sensitizing growers

Although the government had launched IPM programmes for rural areas, urban growers were largely unfamiliar with the life cycles of insect pests, IPM concepts and ecological agriculture. To build the growers’ capacity to analyse local agro-ecosystems and to test production innovations, the project began a programme of farmer fields schools tailored to the urban environment.

Compared to field schools in rural areas, more time had to be dedicated to sensitizing growers to the advantages of group learning. This extended “pre-school” phase also helped identify those growers with sufficient spare time to attend weekly half-day meetings throughout the production season.

Another significant adaptation was the selection of a site for the field school. While in rural areas, learning often takes place in the field of a participating farmer, “distinct attitudes towards individual and communal space” persuaded the organizers to conduct schools on a plot provided by city authorities.

The “urban farmer” field schools proved highly successful. The project reported that FFS led not only to a significant reduction in pesticide use by growers, but encouraged them to form organizations for processing and marketing their produce.

FAO says that encouraging the participation of urban producers in farmer field schools may be an important first step towards the development of formal organizations that can help them win greater access to credit, extension advice and inputs, and formal recognition of what is still, in many cities, an informal and often unrecognized activity.

Further information

Growing greener cities in the Democratic Republic of the Congo (FAO, 2010)
FAO Regional Vegetable IPM programme in Asia:
http://www.vegetableipmasia.org/
FAO Regional IPM programme in the Near East:
http://www.ipm-neareast.com/