

CTA SEMINAR
PROCEEDINGS

POST-HARVEST MANAGEMENT OF TROPICAL FRUITS AND ORNAMENTALS IN THE CARIBBEAN REGION

18 - 22 NOVEMBER 1991

TRINIDAD



CARDI

CARIBBEAN AGRICULTURAL RESEARCH
AND DEVELOPMENT INSTITUTE
UNIVERSITY CAMPUS, ST. AUGUSTINE
TRINIDAD AND TOBAGO



TECHNICAL CENTRE FOR
AGRICULTURAL AND RURAL COOPERATION
ACP-EEC LOMÉ CONVENTION
EDE-WAGENINGEN, THE NETHERLANDS

SOCIO-ECONOMIC ASPECTS OF SMALL-SCALE COMMERCIAL PRODUCTION OF FRUITS AND ORNAMENTALS INCLUDING THE ROLE OF WOMEN

J Seepersad and A Rajack

The University of the West Indies, Trinidad & Tobago

As we were thinking about the topic, two recent articles in the newspapers came to mind that has a bearing on the subject for discussion. One from page 22 of the *Express* of November 14, 1991 states "Japanese prefer less work than more money". The second had to do with protests by farmers in a certain area in France, long known for a particular type of cheese. That industry was likely to be undermined by the opening up of certain trade barriers. Although the economic threat was an important consideration, a certain amount of pride was also at stake; they were likely to lose something that they have been proud about and which perhaps gave them a sense of rich traditions and cultural heritage.

Both these articles remind us first, that economic considerations are not the only ones that motivate people; they have many personal goals other than profit maximisation. Second, asking persons to shift from one area of activity with which they have been long involved to a new area should not be taken lightly since there are all kinds of ramifications. We are, therefore, particularly pleased to see that an opportunity has been provided at this meeting for looking at a broad range of issues – the social and cultural as well as the economic.

Small-scale farming – Conceptual issues

Definition

Much of the small-scale production of fruits and ornamentals would most likely involve small-scale farmers and thus, we need to define small-scale farming. "Small-scale" is obviously a relative term depending on:

- which country one is referring to
- what enterprises are involved
- the size of investment or income generated from the operation.

Thus, a small-scale operation in orchids covers a much smaller area of land than a small-scale citrus cultivation or even vegetables, and it may involve considerably higher levels of investment. Again, 100 acres of citrus may be considered large-scale in some countries, but quite small-scale in others. Two important traits that generally characterize small-scale farms are:

- They are generally family farms.
- They operate with limited resources.

These two traits will now be discussed.

Family farms

Hildebrand (1983) of the University of Gainesville, a well-known name in Farming Systems Research, defines family farms as: "Those which are first a home rather than first a business. Decisions are made from the point of view of the home. A farm is not a family farm by this definition if business decisions are made independently of family considerations. Rather the well-being of the home and family override profit considerations".

We agree with that in essence but we would prefer to say that "activities of the farm and home are closely interrelated; decisions about either the farm or home are

made in the context of how one affects the other". Of course, we are sure you can think of exceptions and there are different degrees for which those definitions are true, depending on the extent to which a farm operates as a family farm or a business concern. But, in general, it is important to recognise the strong link between the farm and the home.

Limited resources

Again we are dealing with a relative term, since farmers will insist, quite correctly, that they all possess limited resources. However, the point here is to emphasize the real operational factors that cause or influence small-scale farmers not to adopt certain technologies which to the experts would offer increased economic benefits to them. The older view of small farmers at the extreme was that they are resistant to change, and they are not as smart or intelligent as the others. Thus perhaps, it is a waste of time to concentrate on them for the introduction of new enterprises or modern technology and the like.

Although that view or notion still prevails in certain quarters, another perspective, if one attempts to see the situation from their point of view, is that the so-called "resistance to change" is really a rational response to the circumstances which they, the small farmers face. One of the major considerations in explaining their adoption behaviour is the quantity and quality of resources they possess or to which they have access. Improving their situation, or providing a greater level of resources to them would, no doubt, make them more "responsive" to new technology.

Some small-scale production may not fit the characteristics above, especially with reference to ornamentals. Small-scale production may be carried out by persons on a "part-time" basis but access to certain resources may not be a severe constraint nor would the income from the enterprise be critical to family income. Such persons may include, for example, the wives of businessmen, lawyers, doctors and others of high "socio-economic" status.

A related consideration here is to what extent are the technologies scale-neutral? Many are better suited to large-scale

commercial production and, therefore, not "appropriate" to small-scale farmers/-producers with a certain level of resources.

Implications of selected factors on small-scale production

Family farm orientation

In the family farm situation where there is a strong link between the farm and the home, considerations relating to risk become paramount. The first concern would be to have a level of income and food supplies that would ensure survival and security. Thus, the tendency would be for small-scale farmers to stick with the "known" or "proven" in terms of the technology they use, the markets that are available and the skills they have.

There would be the tendency to have diversified operations to spread their risks and to ensure the production of some staple food supplies. The other side to this practice, however, is that this results in the creation of smaller enterprises which militates against economies of scale. Much of the small-scale production of fruits comes from such diversified operations. Also, the fact that there are many different types of enterprise means that less time is available for the management of each enterprise than would be available to managers of large-scale, commercial and specialized farms. Very few small-scale producers can afford to be full-time managers since they also provide labour. Certain types of enterprise dealing with ornamentals demand high levels of management and small-scale producers may be at a disadvantage in this situation.

Income

In the small farmers' situation, the enterprises either singly or in combination, should provide a pattern of cash flow and, of course, total family income that would meet the households demands. Long-maturing crops may be avoided unless income can be earned in the short-term by interplanting them with quick maturing crops which will give an immediate income.

Land

There are several aspects relating to land that are important. First, the **amount** and **quality** of land is a key issue. Where limited good quality land is available, the tendency would be to go for short-term crops. Longer maturing fruit crops are not likely to offer the same prospects for farm income as vegetables and root crops. Of course, ornamentals can also be an economically viable enterprise, but other factors could pose problems.

Land tenure also needs to be considered. Insecure forms of tenure would discourage the introduction of long-term enterprises such as tree crops or those which require certain types of costly infrastructure, e.g. farm roads, greenhouses, irrigation facilities, etc.

The proximity of the land to the homes of the producers could also affect their choice of enterprises. With fruits, praedial larceny could be a serious problem and so producers will not be inclined to grow this crop if their land is too far away from their homes, making it difficult to supervise on a regular basis.

Labour

The small-scale family may have a good pool of family labour from which to draw. This is an advantage when considering ornamentals which will generally have a greater demand for labour than fruits. However, certain specialized skills will be needed which farm families may need to acquire.

Capital

The small-scale farm family in general operates with low levels of capital. In many cases, too, they are not able to access adequate credit due to lack of the required collateral. The production of certain types of ornamentals needs substantial capital and high levels of investment and thus the small-scale producers will be at a distinct disadvantage in this situation.

The ratio of fixed to variable resources is also different. Large commercial farms have an abundant capital basis and additional resources of most kinds can be

purchased when needed. In a small farm this is not the case; a high proportion of the resources is fixed for the farm.

Access to technical information

Particularly for ornamentals, technical information may not be easily available from public agencies although more and more training courses are now being offered. Such information is largely provided through various associations (e.g. Horticultural Society, Orchid Society) which are not now, or likely to be, well patronised by the small-scale producer. Thus, government extension and research departments and other support institutions will need to be better equipped to service the research, information and other needs in those non-traditional areas.

Alternatively, or in addition, one can look at "contract farming" approaches. For example, an agro-processor may contract suppliers for certain products while providing technical advice and assisting with inputs to ensure adequate supplies of a certain quality. Cost recovery approaches involving fees for service for high value commodities could also be explored. However, the cost recovery approach could result in a bias in the provision of information to those who can afford the fees and small-scale producers may be neglected.

Access to specialized inputs

Certain enterprises as in the case with some ornamentals, require specialized inputs such as fertilizers and pesticides which may not be available from local supplies. Adequate supplies of planting material may also pose a problem. Those inputs and planting materials will thus have to be imported directly from abroad which will only be profitable for large-scale commercial operations.

Export considerations

Although there is a significant local demand for certain fruits and ornamentals, this could be met in many instances by a few large-scale producers coming on the scene. Thus we will have to look further towards the export trade. New market sources have to be located and networks for sale and

distribution put in place. There are stringent quality standards and strict deadlines. In addition, those who are already engaged in marketing overseas have expressed the need to "police" their produce. Thus export marketing will likely prove an insurmountable hurdle to the small-scale producer acting on his/her own.

Where there is a large number of small-scale producers, a "co-operative" approach to purchasing inputs and marketing may offer viable alternatives. Governmental and other agencies could also play a useful role. Two examples that quickly come to mind, though not specifically in the area of fruits and ornamentals, are drawn from Montserrat and Nevis. In Montserrat, the Ministry of Agriculture plays the lead role in "production co-ordination" for specified crops so that supplies are in tune with demand. In Nevis, the Ministry of Agriculture has helped to organize farmers to produce certain vegetables for a large hotel. The ministry plays a key role in the provision of technical advice, in assisting with the necessary inputs, and in the marketing process.

Role of women

With the strong link between the farm and home in the family-farm situation, the interlocking roles of the family members need to be clearly understood. New enterprises and technology must not work to the detriment of specific family members or marginalize them. Small-scale production of ornamentals however offers some income generating opportunities to women – it can be done on small portions of unused lands around the home and still give a reasonable income. However, this should not be at the expense of crops in the "kitchen garden" that play an important role in the family's diet in many small farm situations.

Women constitute much of the labour force in the fruit processing industries. As those industries expand, the demand for their labour will increase. Again, the implications of this trend needs to be carefully considered so that the net effect is the improvement of women and their families. Specific areas such as appropriate training and satisfactory working conditions must be given special attention.

Attitudinal/cultural variables

While the previous sections have covered broad factors that are embedded in the socio-cultural context of the Caribbean, this section will look briefly at some other specific attitudinal variables relevant to the small-scale production of fruits and ornamentals. For example, traditionally, the cultivation of flowers has been the woman's role. In many circles, it may continue to be "relegated" to the domain of women, and men may not view it as a worthwhile "agricultural" pursuit. Similar sorts of cultural perceptions will have to be overcome as regards certain types of fruits, where in the traditional systems they were grown mixed with other crops or on borders. For example growing mango in pure stands will necessitate re-orientation in the way of thinking about the cultivation of mangoes.

Conclusion

The paper has examined a number of socio-economic and cultural issues related to the small-scale production of fruits and ornamentals with specific reference to the Caribbean context. While there are many hurdles to be overcome for the successful development of small-scale enterprises in those areas, they also represent opportunities for improving the levels of income and the well-being of small-scale producers. The presentation provides a framework for examination of those issues and points to broad directions that may be fruitfully pursued.

Information sources

Publications

- Caribbean Food Crops Society. 1986. Proceedings of the Twenty-Second Annual Meeting. Volume XXII. Saint Lucia, August 25-29, 1986
- The Horticultural Society of Trinidad and Tobago. 1990. Flower Show Annual.

Resource persons

Braithwaite, R A I , Senior Lecturer, Department of Crop Science, The University of the West Indies, St Augustine, Trinidad and Tobago; President, The Horticultural Society of Trinidad and Tobago.

Roberts-Nkrumah, L, Lecturer, Department of Crop Science, The University of the West Indies, St Augustine, Trinidad and Tobago.

Reference cited

Hildebrand, P. 1983. Economic characteristics of small-scale, limited resource family farms: Implications for technology. Working Paper, Institute of Food and Agricultural Sciences (IFAS), University of Florida, USA