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**THEMATIC EVALUATION OF ORGANIC AGRICULTURE
IN
LATIN AMERICA AND THE CARIBBEAN**



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THEMATIC EVALUATION OF ORGANIC AGRICULTURE IN LATIN AMERICA AND THE CARIBBEAN*

I. INTRODUCTION

1. Organic agriculture is an alternative for the diversification of production, and hence for the diversification of income sources, among small poor farmers – one of the main target groups of IFAD projects. This document provides practical lessons and recommendations for determining under which conditions organic agriculture could become a feasible project alternative, highlighting issues that must be considered at design and implementation stages.

II. EVALUATION PROCESS AND METHODOLOGY

2. These lessons originate from a thematic study by the Office of Evaluation and Studies (OE) conducted from the beginning of 2001 to mid-2002. The study was requested by the Latin America and the Caribbean Division (PL), and was based on the fact that many IFAD-supported projects in Latin America and the Caribbean (LAC) are already promoting organic agriculture. OE approved this proposal in 2000 as highly relevant for LAC and, potentially, for other regions. An approach paper was drafted before year-end and a core learning partnership (CLP) created, including all IFAD regional economists and the technical advisor for agriculture. Given the innovative nature of the study, an advisory committee external to IFAD was created to review drafts of the evaluation and advise the CLP on possible improvements.

3. The study analysed seven cases in which small-farmer groups had been successful in adopting organic technologies and marketing their products. The cases were located in six countries (Argentina, Costa Rica, the Dominican Republic, El Salvador, Guatemala and Mexico) with different policies towards organic agriculture and various degrees of development of the institutions dealing with it. The study included diverse products (coffee, banana, cacao, vegetables, sugar cane and honey) that posed different technical and marketing problems for small producers. Three cases consisted of farmer organizations working with IFAD projects and four involved indigenous communities. Six of the cases dealt with organic products sold mainly in foreign markets (mostly in the European Union and the United States), while one (El Salvador) included products sold in the domestic market. In total, the study covered 14 farmer groups comprising more than 5 100 small farmers with about 2 hectares (ha) each, who cultivated a total of more than 9 000 ha.

4. A draft of the main report was reviewed by a technical committee of specialists in rural development, rural poverty and organic agriculture, and by the CLP. External specialists also reviewed and provided feedback on individual country reports. All feedback was incorporated into later versions of the main and country reports. A workshop on Organic Agriculture in Latin America, organized jointly by OE and PL, was held in Rome on 11-12 September 2002. It included participants from IFAD, other international organizations working with rural poverty and with organic agriculture, and representatives of non-governmental organizations (NGOs), producers, buyers and distributors of organic products. The discussions served to validate the findings of the thematic study and provided additional feedback. Finally, the lessons drew on interviews carried out after the workshop with members of the CLP, who provided their views on the study's findings and on constraints and problems that might be specific to the various regional contexts in which IFAD operates.

* The original title of the thematic evaluation was "The Adoption of Organic Agriculture Among Small Farmers in Latin America and the Caribbean".



III. THE CONCEPT OF ORGANIC AGRICULTURE

5. The definition of organic agriculture is a matter of debate in itself. However, all definitions agree that it implies the application of agronomic, biological and mechanical methods of production in place of the use of synthetic chemical inputs. Most definitions also incorporate the use of several techniques not exclusive to organic agriculture, as they may be applied in conventional and low-input production systems as well. These include, in particular, “better land husbandry” techniques such as soil-conservation measures, crop rotation and the use of green manure, instead of slashing and burning.

6. An important differentiation involves ‘certified’ vs. ‘non-certified’ organic agriculture. A high proportion of small farmers in LAC countries do not use chemical inputs, and in that sense they are already producing organically. However, there has been an increasing trend in both the industrialized world and developing nations to develop laws and regulations that protect the use of the term ‘organic’ and equivalents such as ‘biological’ and ‘natural’. According to these laws and regulations, products require certification by specialized agencies in order to be sold as organic, biological or natural. Certification relates to consumer demand for a standardized definition of how an organic product has been produced, thus avoiding misleading claims. The practical result is that producers who do not obtain certification are not likely to obtain premium prices for their products, even if they meet all other requirements of production technology.

IV. CONCLUSIONS AND RECOMMENDATIONS OF THE EVALUATION

7. The study and workshop generated conclusions and recommendations on the feasibility of organic agriculture as an alternative in projects targeting small farmers and on the handling of the constraints and problems that may appear when promoting organic agriculture. These conclusions and recommendations are mainly applicable in the LAC context, and their generalization to other regions may require similar thematic studies. Such studies could pay particular attention to location-specific issues such as soil characteristics, dominant land-tenure and production systems and government policies. The main conclusions, recommendations and lessons are synthesized in the following paragraphs.

A. Potential and Risks of Organic Agriculture in Rural Development Projects

8. The study compared the impact of shifting agriculture and organic production on small-farmer production and incomes. The results suggest that organic agriculture may be an attractive alternative for diversifying the production of small farmers. While the case studies showed evolution of different production costs, yields and product prices among small farmers that converted to organic agriculture, all obtained higher net revenues than with their previous practices.

9. In all case studies, farmers were able to receive higher prices for certified organic products than if they had sold the same products in conventional markets. The premium received by farmers over the price of conventional products varied greatly, going from a minimum of 22.2% paid to banana producers in the Dominican Republic in 2002 to 150% paid to cacao producers in Costa Rica in 2001.

10. The evolution of production costs was related to the characteristics of each previous production system. Farmers who had applied systems approximating organic practices (coffee in Mexico and Guatemala, cacao and banana in Costa Rica, banana in the Dominican Republic, honey in Mexico) experienced an increase in production costs because of the introduction of labour-intensive technologies. Small farmers used mainly family labour to cover the higher demand. In addition,



farmers also faced new costs related to certification. In contrast, those farmers who applied chemical inputs before shifting to organic methods (sugar cane in Argentina, vegetables in El Salvador) experienced a decrease in total production costs, because greatly reduced expenditures for chemical inputs outweighed the higher labour costs associated with organic production.

11. Those farmers whose previous systems had approximated the organic one experienced a rapid increase in yields when shifting to organic methods. In contrast, those who had previously applied chemical inputs obtained lower yields during the first years of adoption. Some cases experienced no significant changes in yields (honey in Mexico, banana in the Dominican Republic). All who adopted organic production obtained higher prices for their products than nearby conventional producers. While higher prices are partly explained by the organic nature of the products, the type of relationship that farmers established with buyers also played a key role in price margins, with higher prices being obtained when farmer organizations engaged in long-term relationships with buyers. Specialists participating in the Rome workshop stressed that organic agriculture may lead to more stable prices for small farmers – an effect also identified in one of the case studies (vegetables in El Salvador).

12. The sustainability of these effects depends on many factors, including the capacity to maintain similar or higher yields and the future evolution of prices. Yield capacity depends partly on the application of organic fertilizers in qualities and quantities that compensate for nutrients extracted by crops. The workshop discussions stressed that while organic-product markets are presently growing rapidly, premium prices may decline in the future.

13. Interestingly, small farmers dominated organic production in all the countries in which case studies were carried out – and in most of the other LAC countries – and smallholders accounted for most of the area under organic farming, with the exception of Argentina. Such a dominant presence suggests that small farmers may have some comparative advantages in organic production. First, most small farmers in LAC already produce more or less organically, using few or no chemical inputs, and frequently grow crops in the forests and with other species. Thus they find it relatively easy to convert to organic production, introducing only marginal improvements in the technologies they already apply. In addition, they are likely to experience a lower incidence of pests and diseases when they switch to certified production. In contrast, larger, more-capitalized farmers, who produce with technologies based on chemical inputs, often face greater difficulties when shifting to organic production. They need to learn quite different technologies, and their crops are initially more vulnerable to pests and disease. Another important factor is that the technologies of organic production are labour intensive and require little investment, thus using the production factor most available to small farmers. Finally, organic agriculture makes small farmers less dependent on chemical inputs that have to be purchased, which are priced higher for small farmers because of increased transportation costs in rural areas and higher unit costs for small volumes.

14. The study showed that organic production was associated with positive effects on the health of producers and workers and on the environment. It also collected anecdotal evidence of past problems associated with chemical inputs (sugar cane in Argentina and vegetables in El Salvador). Organic producers stated that their concern for the potential health effects of chemical inputs had been an important factor in their conversion to organic methods. In addition, organic producers often used environmentally friendly technologies – sometimes even before certifying their plantations as organic – cultivating their crops under the shade of native trees and using few or no chemical inputs. Organic agriculture is also advantageous to small farmers because it uses their traditional knowledge of the natural environment and of the relationships between crops or animals and the environment, and is thus more understandable.

15. Finally, workshop discussions pointed out that organic agriculture provides advantages to the wider community as well, promoting erosion control, soil fertility and cover, biodiversity (especially forest cover) and a reduction in the use of toxic chemicals.



B. Strategic Issues

(a) Introducing organic agriculture through a gradual approach

16. If IFAD decides to include organic agriculture in its projects, it would be desirable to do this gradually, at least during the first few years. This would enable a correct conversion to organic production, while learning from the practice of implementation. A rapid, superficial shift could lead to failure, thus jeopardizing the possibility of continuing with organic agriculture, even where this mode of production would have proven to be the most cost-effective had the shift been properly effected.

(b) Generating knowledge to move forward in other regions

17. The lessons of the thematic study are valid for the LAC region, and many can be generalized and applied to other regions where conditions are similar. However, regions have great differences in land-tenure and production systems, availability of family labour and the characteristics of natural resources. Thus, should IFAD opt for supporting organic production, it should first undertake similar thematic studies in other regions. Such studies would clarify the possibilities of organic agriculture in those regions, specific problems and constraints that organic agriculture could face, and possible solutions.

C. Operational Issues

18. The study and workshop generated relevant lessons on the inclusion of organic agriculture in IFAD projects. A list of issues follows that should be carefully considered in every project including organic agriculture.

(a) Identifying those most likely to adopt organic agriculture

19. It is possible that not all small farmers will possess the conditions to convert successfully to organic production. Projects should focus on those likely to succeed and eventually incorporate other farmers. The most important factors in the capacity of small farmers to shift to organic production are the following:

- **Farmer motivation.** The feasibility of organic agriculture will be much greater if farmers are highly motivated, particularly by health or environmental concerns, or motivation other than the economic advantages.
- **Soil characteristics.** The existence of fertile soils will make it easier for farmers to practice organic agriculture, because it will be easier and probably less costly to maintain fertility with available organic technologies.
- **Previously applied systems of production and technologies.** Farmers using production systems approximating organic ones (i.e. reduced use of chemical inputs) will find it easier to meet the requirements of organic certification, as they will need to make only marginal changes in their production technologies and their yields are not likely to drop.
- **Land tenure.** Those who have more stable, secure land tenure will have much greater incentive to make the required investments in land-conservation measures, such as reduction of burning before plantation, introduction of crop-rotation methods and soil-conservation measures, and the conservation of natural forests.



- **Availability of family labour.** Those who have more family labour available will find it easier to face the higher demand for labour associated with organic methods of production.

(b) Comparing organic agriculture to other options

20. Since the target population of a project may include various groups with different characteristics, projects may apply different strategies to these groups. Thus organic agriculture should not be considered as a unique alternative, but as one of the alternatives in a menu of possible options, many of which could be part of a particular project. Organic agriculture should not be considered in opposition to conventional agriculture or other low-input production systems. Certified organic agriculture may be most appropriate for some small farmers, while other kinds of low-input technologies may be more appropriate for others.

(c) Dealing with potential technological problems

21. The study showed that small farmers usually found organic technologies relatively easy to apply. However, projects may face the following significant problems:

- **Obtaining products of good quality.** Buyers of organic products from industrialized countries are becoming increasingly more demanding in terms of quality – a trend that is likely to continue. Because small farmers in some cases had problems obtaining products that met increasing quality standards (e.g. banana in the Dominican Republic and vegetables in El Salvador), medium-sized and larger organic producers were gaining more space in the market. Projects need to include interventions that focus on obtaining products of high quality.
- **Monitoring compliance with organic methods of production.** The case studies demonstrated that fraud might constitute a serious problem faced by small-farmer organizations producing organic products. In fact, one or a few organization members might be tempted to obtain premium prices without complying fully with organic methods of production. In this way, the whole organization could lose access to a particular market, thus making the whole organization forfeit income and the trust of buyers. Projects should pay great attention to helping organizations establish mechanisms to control compliance with organic methods of production and to penalize producers not in compliance.
- **Dealing with an insufficient supply of technologies and of professionals specialized in organic technologies.** The incorporation of organic production issues into research and education agendas is crucial to generating a supply of technologies appropriate to local conditions – and of professionals with adequate training to participate in projects. Thus it is essential to determine if these programmes exist in a particular country, if there is availability of technologies appropriate to local conditions, and if there is a sufficient supply of professionals for a given project. If they have not yet been developed, corrective measures should be included, such as support to the research and training programmes of national institutions.

22. As documented by the case studies, organic production techniques must ensure that adequate supplies of organic fertilizers compensate for extraction of nutrients by crops. Otherwise, organic production could go well for a few years, but still be unsustainable in the medium to long term. The provision of adequate fertilization is especially relevant in regions with poor soils. In addition, the application of adequate quantities of organic fertilizers of the required quality may face several constraints, including their scarcity in the region, high cost or alternative uses, i.e. as fuel for household cooking. These potential problems should be identified to determine the feasibility of organic agriculture, and corrective measures implemented if possible.



(d) Promoting farmer organizations

23. The thematic study concluded that farmer organizations played a key role in the incorporation of small farmers into organic production:

- They made it possible to take advantage of economies of scale through collective marketing, managing volumes that were of interest to foreign buyers. In addition, buyers were eager to deal with associations, because it was easier and more economical to negotiate and implement contracts with one or a few associations than with many individual small farmers.
- They were able to train many small farmers in the basics of organic production and to promote the adoption of new technologies.
- They also organized monitoring systems to control members' compliance with organic methods of production and to penalize those that did not comply. When a monitoring system worked well, it served to decrease the costs of certification significantly for individual association members, because the certification agency did not have to carry out inspections of all association members, but only of a sample.
- Finally, they were able to attract the help of government agencies and/or NGOs, for themselves and their members, in adopting the necessary changes to begin organic production.

24. Based on this evidence, programmes and projects that promote the adoption of organic crops among small farmers should include interventions to strongly support farmer organizations. This is far from an easy task, because organic production will place great organizational demands on farmer associations: (i) organic agricultural products in developing countries are often sold in foreign markets, so the organization will have to deal with more-demanding foreign buyers in terms of both quality and the timing of deliveries; exporting is also more demanding in logistics and coordination; and (ii) certification of production will require expensive inspections and certification costs (particularly during the transitional period), set-up and operation of a monitoring system, and promotion of participation at the grass-roots level in order to avoid fraud. Thus projects aiming to support organic agriculture should target groups of small farmers that have reasonable prospects of succeeding in their collective action.

25. In addition, specific measures should be included to help farmer organizations develop effective monitoring systems. These systems will mainly require: (i) strengthening managerial and organizational skills through training and the provision of relevant technical assistance; (ii) some material resources (a computer and software to organize information and the vehicles needed to carry out inspections); and (iii) intensive initial training of organization members in the basics of organic production and the risks to all members of non-compliance even by isolated farmers.

(e) Dealing with the marketing of organic production

26. Some advantages of organic-product markets are fast growth, higher prices and buyers interested in the welfare of producers. At the same time, it is difficult to say whether this market will always be a niche market or will succeed in growing into a mass market.

27. In any case, projects cannot assume that markets are easily available and accessible or that farmer organizations can rely on 'spot' markets of one-time transactions. The thematic study concluded that marketing of organic products through farmer organizations that established direct contacts with buyers was key to obtaining better prices. Long-term contracts were preferable, because they provided a safe market and more stable prices. Access to the fair-trade market substantially



increased the final price and further reduced price instability. Thus projects should include measures to improve the capacity of organizations to deal with markets and negotiate long-term agreements with buyers.

28. Contract farming schemes facilitated the marketing of small-farmer production and brought access to extension services and occasionally credit, but they also had some disadvantages. Small farmers had a relatively weak position in negotiations with these processing and marketing firms, because they had limited information and poor organization. In the end, they received relatively low prices and accepted undesirable contract terms. In addition, out-grower schemes may have severe limitations, including the high cost of monitoring small farmers and difficulty in realizing the benefits of investment in out-grower schemes due to diversion of output to other buyers offering higher prices than those of the contracts. Thus large buyers may play an important role in promoting organic production more through providing demand and channelling knowledge to producers and producer associations than through the promotion of out-grower schemes. Projects might still promote contract farming, but in this case they should incorporate legal advice on the negotiation of better contracts.

29. Although most of the cases in the study included products for export, local markets would have great advantages for small farmers in terms of access and more flexibility regarding quality and volume requirements. However, local organic markets in Latin American countries are very limited and often lack regulation. In any case, projects need to take the current constraints of local markets into account. Organic agriculture for the domestic market can be promoted when good possibilities exist for sales to supermarkets and food chains.

(f) Preventing financial constraints

30. Surprisingly, in all the cases, organic production developed in spite of limited availability of formal sources of on-farm credit. This related not only to small farmers' difficulties in accessing formal credit, but also to the fact that financial institutions in most countries did not recognize the difference between organic and conventional agriculture. Thus they could provide credit to a particular crop, but not to the organic version, which had specific characteristics and financial needs. While small farmers that shifted to organic production did not have to make significant on-farm investments – mainly because their previously dominant production was close to the organic model – they still required some financial support. The most important investment was the introduction of soil-conservation measures, and while small farmers mainly used family labour, they usually needed to hire some wage labour to implement these measures. In addition, organic producers faced higher production costs related to the implementation of new manual tasks and to certification.

31. The transitional period – the first two or three years after farmers start to produce organically – is the most difficult in terms of financial needs. During this period, farmers must carry out soil-conservation measures and pay for certification costs without yet being able to obtain certification. As a result, they usually do not receive premium prices and would thus benefit greatly from the availability of short-term credit for hiring the wage labour needed. This type of credit is especially needed by women producers, who usually lack family labour and have fewer resources to pay for wage labour. In addition, projects could provide grants for investment in soil-conservation measures and for certification costs during this period. Grants would need particularly careful management to avoid potential distortions of local markets and paternalistic attitudes on the part of both project beneficiaries and staff.

32. The most important off-farm investments required by organic production included packing and storage facilities for products such as coffee, cacao, banana and vegetables. Because these investments were too costly for individual small farmers, they were usually carried out by farmer associations or marketing firms. When farmer associations functioned well, these investments allowed them to capture a substantially higher portion of the final price of organic products. Thus projects



should make financial resources available to support investment in packing and storage facilities of farmer associations that are well organized and have good prospects for success. In addition, funding should be secured for purchase by the association of the organic production of members.

(g) Promoting policy change

33. Small organic producers and their organizations often benefited from government programmes and agencies, receiving public funding and technical assistance to implement the changes needed to convert to organic production. However, almost none of these agencies and programmes specifically targeted organic production. Government policies and institutions dealing specifically with organic agriculture played a marginal role both in the emergence of organic products in the countries in this study and in the success of small organic producers of the case studies in particular. While this evidence may lead one to think that specific policies and institutions may not be necessary, it is important to support their development, because importing countries (mainly of the European Union (EU)) are increasingly requiring them in order to ensure that organic products are produced and certified according to common standards. In addition, national laws and regulations make possible the lowering of certification costs faced by small farmers, as they lead to the establishment of nationally based certification firms. The experience of the countries most advanced in developing specific policies and institutions suggests that a government programme dealing with organic agriculture may be both inexpensive and effective.

34. Macroeconomic, agricultural and trade policies are also important to the development of organic agriculture among small farmers. These policies are frequently biased towards mechanization and the use of chemicals, for example through subsidies and low tariffs on imports of agricultural machinery and chemical inputs. The promotion of organic agriculture in a project requires understanding the policy context and ensuring that it does not pose substantial barriers to the success of the initiative. If such is the case, actions to encourage changes in these policies should be undertaken before including organic agriculture.

(h) Concentrating on the transitional period

35. As mentioned previously, the transitional period is the most crucial for all organic farmers; all of the problems and constraints mentioned above are then likely to be the most acute. Non-economic problems can include the need for major attitudinal changes towards the environment, product quality, organization and participation. Every project introducing organic agriculture will need to determine the likely problems in the transitional period for the specific products to be produced and to implement measures to correct them. Each project will need to concentrate its training and technical assistance efforts in that period.

V. CONCLUSIONS AND RECOMMENDATIONS OF THE 'VALIDATION' WORKSHOP

36. The workshop on Organic Agriculture in Latin America, organized jointly by OE and PL, presented and discussed the findings of the thematic study in order to derive conclusions and implications for future IFAD initiatives. The study and workshop were the first step for IFAD in discussing future opportunities involving organic agriculture. The second will be a regional workshop in Costa Rica, to be held in 2003.

37. In order to ensure an open and relevant discussion on the main issues raised by the study, OE invited representatives of: (i) donors and international organizations; (ii) research institutions; (iii) private companies; (iv) certification agencies; (v) NGOs; (vi) field project managers; and (vii) cooperatives of organic producers from Latin America. The workshop was opened by the



President of IFAD, followed by the Assistant President of the Programme Management Department and the Director of the Office of Evaluation and Studies.

38. The workshop's organizers first established a working definition of organic agriculture, with the purpose of avoiding long and sometimes divisive discussions over a precise definition. The definition chosen, which follows, derives from that of the International Federation of Organic Agriculture Movements (IFOAM).

39. The term 'organic agriculture' refers to a farming system employing management practices that seek to nurture ecosystems capable of achieving sustainable productivity and providing weed, pest and disease control. This is done through a diverse mix of: mutually dependent life forms, recycling of plant and animal residues, crop selection and rotation, water management, tillage and cultivation. Soil fertility is maintained and enhanced by a system that optimizes soil biological activity and conserves soil resources. The use of chemicals is strictly limited to tolerance levels established by IFOAM. Organic livestock husbandry is achieved by a combination of good-quality, organically grown fodder; appropriate stocking rates; livestock husbandry systems appropriate to behavioural needs; and animal management practices that minimize stress and seek to promote animal health and welfare, prevent disease and avoid the use of chemical allopathic veterinary drugs (including antibiotics). Thus, according to this definition, we can speak of small farmers using organic agriculture, with few or no chemical inputs, whether or not it has yet been officially certified as such.

40. The following brief resume of the conclusions of the workshop is organized according to the questions dealt with in the working groups. The first three questions regard the nature and viability of organic agriculture in general and were discussed by all the working groups, while the following five questions have to do with specific aspects of organic agriculture, which were discussed by individual groups dedicated to those specific topics.

A. What are the advantages and disadvantages of organic agriculture for small farmers in developing countries?

41. A major advantage of organic agriculture for small farmers is the higher and generally more stable prices that this specialized market offers. Among the many benefits brought about by higher incomes are higher standards of living and increased food security.

42. Organic agriculture is also advantageous to small farmers because it uses their traditional knowledge of the natural environment and of the unique relationships between various crops or animals and the environment. It is thus somewhat easier for small farmers to understand. At the same time, it avoids chemical inputs, which for small farmers are generally higher priced (because of increased transportation costs in rural areas and higher unit costs brought about by lower volumes), and to which they have not become as dependent as large-scale conventional farmers often have. Furthermore, the health factor of not having to handle harmful chemicals is particularly important to small farmers.

43. There was a fair amount of discussion as to whether or not organic agriculture was a lower-cost technology, and whether or not it promoted biodiversity. The most accurate conclusion in each case is that impact will probably vary depending on the particular situation in which it is applied. For instance, in the case of farmers who diversified the shade plants of their coffee in order to meet the criteria of organic coffee, biodiversity was enhanced, whereas in most cases of organic sugar producers in Argentina, biodiversity decreased. Production costs may increase with the adoption of organic agriculture if major soil-conservation works are required and if, for instance, farmers must do more mechanical weed control. However, in other cases, the use of cover crops to control weeds and natural methods of controlling pests obviate the use of expensive pesticides, hence reducing production costs.



44. Organic agriculture provides advantages to the wider community as well. To the extent that it promotes more erosion control, soil fertility and cover, biodiversity (especially forest cover) and a reduction in the use of toxic chemicals over conventional or traditional agriculture, it provides downstream communities with a cleaner, healthier and more-abundant water supply and neighbouring communities with all the advantages of a healthier, less-polluted environment.

45. The disadvantages or constraints inherent in small-farmer adoption of organic agriculture were seen to include: the limited amount of truly scientific research on organic technologies, especially under small-scale farming conditions; the often difficult access to needed plant material, animal breeds and plant-protection inputs; lessened ability to react to unforeseen external factors, such as the sudden arrival of new pests or diseases; the high cost of certification; the difficulty small farmers have in negotiating contracts with buyers; inaccessibility of organic markets to most small farmers; and the bias of most nations' legal structures in favour of conventional agriculture.

46. Particularly difficult hurdles are the need for well-functioning, fairly complex farmer organizations; the major costs often involved in making the transition to organic agriculture (without correspondingly increased product prices), and the need for organizations to maintain strict adherence to organic standards with regard to both production procedures and quality control of the product.

47. Some concern was also voiced about the perceived difficulty organic agriculture may have in sustaining soil-fertility and nutrient levels. Nevertheless, with the use of purchased organic matter, organic nutrient sprays and green manure/cover crops – in addition to more-traditional techniques such as crop residues and compost – this problem no longer exists in the vast majority of cases.

48. Finally, whereas organic-product markets were seen as having more profitable and stable prices, they were also thought to be more vulnerable due to their smaller size and dependence on specific contracts or relationships with a limited number of buyers.

49. In balance, the consensus was that organic agriculture could definitely be advantageous for small farmers, albeit under a number of conditions.

B. Under what conditions and for what kinds of small farmers is organic production a feasible alternative?

50. The feasibility of organic agriculture will first of all be greatly enhanced if the farmers themselves are highly motivated, especially if the desire is motivated by health or environmental concerns, or by an important motivation other than the economic advantages involved.

51. Other factors contributing to the appropriateness and feasibility of organic agriculture include the existence of fertile soils, a land-tenure system that ensures at least long-term usufruct rights over a minimum area of land, links to markets, functioning farmer organizations, agricultural practices that do not depend on chemical inputs, and a high level of entrepreneurial ability among farmers. The absence of conditions that exclude organic agriculture, such as the nearby presence of genetically modified crops, will, of course, be essential.

52. Access to additional labour will be an advantage in those cases in which organic agriculture actually increases the labour requirements of farming systems.

53. It is particularly interesting that many of the conditions that favour the adoption of organic agriculture may pertain *primarily* to small farmers. That is, organic agriculture may, at least in some cases and in marked contrast to conventional agriculture, provide a comparative advantage to small, poorer farmers over larger-scale producers. Among these advantages, organic agriculture is easier to



adopt for those who: (i) have not used large amounts of chemical inputs in the past, (ii) have an intimate knowledge of the local ecology, and (iii) have a surplus of inexpensive labour available within the extended family or village.

C. What institutional actors might cooperate in solving major problems related to organic agriculture?

54. One of the working groups analysed this issue and reported that the list of possible institutional collaborators is long and varied. Such a list includes institutions of technical cooperation; government, NGO and private agricultural research; extension services (again, of all three kinds); marketers (commercial and NGO); certification and inspection bodies; importers and exporters; donors; retailers; various agencies of local and national governments; farmer organizations and associations of various kinds; academic institutions, etc.

55. The rule of thumb here would be to look for quality of work and knowledge of the field, rather than limit one's vision to any specific institution. A number of 'nodes' or levels in the value chain should be considered and involved by each actor along this chain.

D. What can be expected regarding the general impact of organic production?

56. Economically, impact will vary according to the previous farming systems used. For instance, high-external-input systems will generally suffer a major transitional period of reduced yields, complicated by no increase in the per-unit price, although over the long term there should be gradually increasing yields with higher prices. Low-external-input systems, however, will usually enjoy increased yields from the first year of conversion, thereby greatly buffering the fact that prices will not increase until later.

57. In other respects, impact will vary greatly depending on local conditions. Projects should capitalize on local community structures and farmer organizations, listen to local people during project design, and implement innovative initiatives with caution. Grants for technical assistance and the establishment of internal quality-control and compliance systems would be particularly helpful.

58. Opinions varied widely as to the value and dangers of subsidizing farmer operations during the transitional period. Some people felt that such subsidization was almost a necessary condition of programme success, while others felt the negative consequences – distortion of local markets, the decreased number of farmers who could thereby participate in such programmes, and the paternalistic attitudes caused by such subsidies – made them a programme feature to be avoided at almost any cost.

E. What major problems occur during the transition to organic production?

59. Most of the economic problems of organic-agriculture adoption have already been listed under general disadvantages. However, it is important to emphasize here that economic problems of small farmers, especially those with fairly high yields and/or heavy use of agrochemicals, will be particularly acute during the transitional period because of the triple blow of a reduction in yields precisely when certification costs are highest and in the absence of an offsetting increase in produce prices.

60. Non-economic problems occurring during the transition to organic production include the need to make major attitudinal changes regarding the environment, product quality and even independence of decision-making, and the need to organize and participate actively in that organization.

61. IFAD's role in overcoming the problems of transition could include providing financial support for certification, facilitating the establishment of farmer organizations, supporting the enforcement of



already existing land-tenure legislation; and lobbying to reduce protectionism and the subsidization of agriculture in developed countries.

62. Through and together with the private sector, IFAD could promote the formation of local organic markets (for instance in hotels); help negotiate and establish long-term contracts with developed-nation buyers; create and/or disseminate information on successful experiences to date; and support the creation of laboratories, seed banks, etc. and of infrastructure for storage and transportation.

F. What problems are connected with the certification process and how can they best be handled?

63. One of the main problems of certification is that the bulk of the work and expense come precisely during the transitional period when farmers are least able to deal with it. In addition, the cost of the service can run as high as a small farmer's average net income for an entire year, especially when done by foreign certifiers.

64. The process of certification is further complicated by a variety of requirements. For instance, some nations within the EU have one list of requirements, the EU as a whole has another, and IFOAM yet another. This unnecessary complexity increases both costs for and confusion among farmers.

65. If skilled, farmer associations can play a major role in making certification a much less painful process for individual farmers. These associations can organize internal control and sanction systems and train farmers to understand their necessity. They can organize and manage extension systems that provide farmers with technical know-how and support them in developing and spreading useful innovations. They can also build and strengthen social relationships, both among farmer members and between farmers and other organizations nationally and overseas.

G. What are the advantages, disadvantages and prospects for the future of organic-product markets?

66. The advantages of present organic-product markets are their amazingly fast growth (15-30% per year), higher prices, buyers interested in the welfare of the producers, and the availability in some cases of better market analyses and special financial resources.

67. Difficulties encountered are a lack of market knowledge in some cases, inadequate partnerships with buyers, small farmers' difficulty in establishing and nurturing international contacts, and volume or quality requirements that restrict or eliminate small-farmer involvement in certain markets. Some of these problems can be solved through the establishment of trade shows, use of the Internet, and learning to establish market linkages and maintain partnerships.

68. In terms of the organic market's future, it is difficult to say whether this market will always be a niche market or will succeed in growing into a mass market in its own right. In any case, one prediction that *can* be made is that there will probably be a declining premium (i.e. a lower price differential between organic and conventional produce). The market may also grow to include many more non-food items.

69. A major point of discussion and, to some extent, disagreement, was the issue of the extent to which programmes should focus primarily on export markets. Local markets would have major advantages over export markets for small farmers. Among these would be lower volume requirements, easier nurturing of relationships with buyers, more flexibility, and probably a wider assortment of products that could be sold. However, local organic markets are almost non-existent, and where they do exist, often have problems of lack of regulation. Nevertheless, there was some



feeling that such markets should be actively encouraged, not only because of their inherent value, but also because they can serve as a training ground to develop skills that can then be used to establish and maintain international markets.

70. Contract farming can be another avenue through which farmers can gradually prepare themselves to work in international markets. Nevertheless, farmers need to avoid becoming dependent on such relationships and should be made aware that they can establish either contracts with fixed prices or with a floor price plus premium.

71. Brokers can play an important role in the establishment and maintenance of organic marketing channels. They can help make sure that supply chains are efficient and that farmers are able to negotiate competitive terms.

H. What could be the role of public institutions?

72. The state has many potential roles. Among them are: establishment of policies that favour diversification, better coordination of public-sector agencies, improved enforcement of commercial contracts, reduction of market distortions (especially those caused by their own subsidies for chemical inputs and large-scale irrigation schemes) and simplification or abrogation of laws that hinder the establishment or management of farmer organizations.

73. Other roles could be assumed. Public institutions might provide funding for organic-agriculture research and extension and contribute to costs associated with the transitional period. They might also establish policies that would reward or punish positive or negative externalities in agriculture. Nevertheless, most Latin American governments have neither the administrative capacity nor the resources to do much more than they are presently doing.

74. Importing countries should definitely work to harmonize organic certification standards and reduce subsidies to their own farmers. They might also promote consumer awareness and help developing-country farmers establish linkages in order to take advantage of new market opportunities.

75. International agencies, NGOs and other organizations might support developing-nation governments in creating enabling environments for organic agriculture, building capacity among farmers, providing infrastructure and financing farmer organizations in carrying out some of the tasks enumerated above. They could also help reduce bank transaction costs (by assuming some of the risks and administrative costs) and provide supporting mechanisms for the regional integration of organic-agriculture efforts, such as the sharing of research results, farmer training and establishment of uniform regional standards.

General Conclusion of the Workshop

76. The general conclusion, as evidenced by many statements made during the day and a half of discussions, is that organic agriculture can be of major value to the poorer farmers of Latin America, but that it is a complicated process in which technical support, farmer organization, marketing concerns, quality and compliance control, and other factors all have to be managed, and often all at once. Thus efforts should be concentrated where absolutely the largest possible number of necessary and contributing factors for success are in place.



VI. NEXT STEPS

77. **Agreement at completion point.** After the September workshop, OE had meetings with all members of the core learning partnership concerning the main lessons learned as they apply to IFAD's concrete planning and decision-making processes. The first step will be finalization of an agreement at completion point, merging the results of the study with the outcome of the workshop. As the two sets of main conclusions do not differ substantially, the agreement should be finalized in the coming weeks.

78. **Regional workshop on organic agriculture in Central America.** The regional division for IFAD operations in Latin America and the Caribbean is organizing a regional workshop in San José de Costa Rica in April 2003 to discuss and disseminate the results of the thematic study and the Rome workshop. This second workshop is being organized in close cooperation with the Central American Regional Unit for Technical Assistance (a joint programme of governments and international cooperation agencies for sustainable rural development in Central America) and the Tropical Agricultural Research and Higher Education Center.

79. The workshop's main objectives are to: (i) identify the role of organic production for rural development and poverty reduction in the region; (ii) validate and adjust ('regionalize') the conclusions and recommendations of the Rome workshop to specific regional requirements; (iii) strengthen the linkage of IFAD projects with other regional actors in organic agriculture so as to share research-and-development experience and avoid duplication; and (iv) identify and prioritize possible future activities in organic agriculture, to be implemented in the region with the aid of IFAD project staff.

80. **Thematic evaluations of organic agriculture in other regions.** Following OE's proposal to carry out similar studies in other IFAD regions with an interest and/or potential in organic agriculture, both the Asia and the Pacific and Near East and North Africa regions have included a study in their proposals for evaluation work in 2003. In addition to supporting the two regions in the analysis of opportunities and challenges related to organic agriculture in their projects, replication of this thematic evaluation in these regions will give the Fund a concrete opportunity to elaborate a corporate position vis-à-vis the adoption of organic agriculture in its projects.

