



## CHAPTER 5

### MARKETS FOR THE RURAL POOR

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*Distance to markets, and the lack of roads, is a central concern for rural communities throughout the developing world. The rural poor need access to competitive markets not just for their produce but also for inputs, assets and technology, consumer goods, credit and labour.*

#### MARKET ACCESS: CONSTRAINTS AND OPPORTUNITIES

The economic environment of the rural poor comprises several interlocking markets: for agricultural produce and for agri-inputs; for production support (agricultural extension) or financial services; for information; for assets, including land and water; for labour; and for food and other consumer goods. The terms upon which the rural poor enter and participate in such markets are sometimes inequitable. Many of the poor are currently passive participants, often obliged to sell low (immediately after harvest) and buy high, with little choice of where they conduct transactions, with whom, and at what price. With the liberalization of domestic markets and the globalization of international markets, these markets have become more open, with more choices, but also complex and uncertain. Today more than ever before, enhancing the ability of the rural poor to reach these markets, and actively engage in them, is one of the most pressing development challenges.

Rural people, especially the poor, often say that one reason they cannot improve their living standards is that they face difficulties of market access.

Low population densities in rural areas, remoteness from centres and high transport costs present real physical barriers in accessing markets. The rural poor are constrained by lack of information about markets, lack of business and negotiating experience, and lack of a collective organization which can give them the power they require to interact on equal terms with other, generally larger and stronger, market intermediaries. Cultural and social distance, and discrimination, may also be factors that at least partly exclude the poor from markets.

Farmers' inability to market produce means lack of income for production inputs, consumer goods and immediate cash requirements, and prevents asset accumulation. Market access thus influences farmers' production systems: those who live close to better roads and have more frequent and direct contact with the market are willing to produce more systematically for the market, while those with poor market access are forced to produce for domestic consumption. In such a situation food consumption is limited to what can be produced on-farm or within the community, in some cases resulting in poorly balanced diets.

How can the market access problem be solved, given the high cost of removing some constraints and the conflicts of interest, between rich and poor, rural and urban, involved in removing others? That is the challenge for NGOs, governments, donors and, above all, the rural poor, whose participation in finding and implementing solutions is needed for success.

The problem of market access may usefully be considered in three dimensions: the physical (the distance of the poor from markets); the political (their inability to influence the terms upon which they participate in the market); and the structural (the lack of market intermediaries). All of these must be tackled if the measures are to have the desired effect on productivity, output or incomes.

Until about 1980, the context for this challenge in most developing countries was state-led industrialization, regulation and protection. Increasingly, liberalization and globalization have changed the nature of the challenge. Liberalization of domestic and international markets gives the poor new opportunities for specializing in, and exchanging, their labour-intensive products. But these trends also increase exposure to world price fluctuations and thus increase the uncertainty of the economic environment within which the rural poor operate, and offer special competitive advantages to those in rural areas endowed with better market access and contacts. While trade liberalization and increased financial flows towards labour-intensive sectors offer big prospects for poverty reduction, they also bring big risks if initial market access is very unequal. Liberalization works best for the rural poor where the distribution of access, skills and probably land assets is not very unequal. Liberalization and globalization with initial gross inequality can allow the powerful to abuse their special access and so result in the poor becoming poorer. But huge poverty reduction in many cases shows that liberalization and globaliza-

tion with fairly low initial inequality can bring widespread benefits to the rural poor.

Globalization of capital flows, access to technology and trade are leading to important changes in economic and social relations across the world, in developing and developed countries, promising new opportunities for growth and income-generating activities for households and firms. Within the rural sector, liberalization has reduced the price bias against farming, price distortions among farm products, and other government intervention. Trade and exchange-rate reform has been central to structural adjustment programmes in developing countries since the 1980s. Most developing countries have liberalized their agriculture to some extent, changing its institutions and structure. This major change implies new conditions for the rural sector, and especially for the rural poor. It is true that, even without the intervention of governments and donors, private sector-led market development will almost certainly take place over time. However, in the absence of intervention, it is quite possible that such development would be highly unbalanced in geographical terms, inequitable in socio-economic terms, and could even further exacerbate poverty for some rural people.

There is thus a role for intervention, with three objectives.

- To speed up the development of market access, choice and information.
- To remove or reduce barriers to market access, both by special support in places where markets are slow to develop spontaneously and by easing market participation of the poor.
- To establish a more equitable set of market relations. This it would do by empowering small-holder farmers and agricultural workers, providing them with the knowledge and skills that they require both to enter the market and to improve the terms upon which they participate in it.

**PROBLEMS OF MARKET ACCESS**

*‘A community without roads does not have a way out.’*

Farmer in Juncal, Ecuador<sup>1</sup>

Market access problems can affect areas (due to remoteness or lack of infrastructure) and groups, such as the illiterate or poorly educated, minority ethnic groups or those not speaking the official national language, and women. The common problem of disadvantaged areas and disadvantaged groups is personal immobility, which frequently impairs responses to changing incentives. People from disadvantaged areas find access to markets restricted by high physical costs and by their lack of knowledge of market mechanisms, a consequence of lack of information and organization. This is compounded by the structure of the markets themselves, the limited market intermediaries and asymmetrical market power. (Box 5.1).

Remoteness and poverty both tend to reduce access to markets, increasing both the physical costs in reaching them and the costs of overcoming imperfect and often discriminatory institutional mechanisms that have sometimes evolved to handle those risks arising from remoteness and

poverty themselves. Some of these physical costs and mechanisms work strongly against women and other disadvantaged groups. Indigenous and poorly educated people are over-represented in rural and remote regions: in large parts of Latin America, indigenous people are concentrated in rural areas, and have higher incidences of poverty, lower levels of literacy and generally less access to land and credit.<sup>2</sup> In other regions, remoteness combines with ethnic and language barriers to restrict market access, especially to labour markets.

*The high physical cost of accessing markets*

Five main aspects of remoteness, rurality and poverty create large physical problems, and often combined constraints, on market access by poor, remote or rural communities:

1. Lack of roads, or presence of seasonally impassable or poorly maintained roads.
2. High transport costs, arising from the lack of well-maintained roads, long distances and lack of affordable, appropriate transport.
3. Poor or non-existent communications infrastructure for disseminating information on markets, products and prices.

**Box 5.1: Market access constraints: physical, structural, information and organization**

Constraint	Disadvantaged areas	Disadvantaged groups
Physical	Poor roads, high transport costs, perishable goods, low value/weight produce.	Those located far from markets; women with heavy time burdens; those with poor access to transport and/or limited access to facilities.
Structural	Asymmetry of market relations: reliance on monopsonistic traders, agro-processors or marketing boards whose market power allows excess profit shares.	Those with poor access to land and credit to allow diversification, commercialization and/or marketing of goods in wider markets; those constrained by traditional or cultural norms.
Skills, information and organization	Lack of understanding of how markets operate, lack of information, lack of relevant skills.	Most of rural poor; those who lack education and collective organization.

4. Low value/weight ratios of much of what poor people make and sell, which make transporting it to market difficult and costly.
5. The perishable nature of much agricultural produce from the rural poor, especially women, combined with a lack of storage facilities and long distances to markets.

Distance to markets, and the lack of roads, is a central concern for rural communities throughout the developing world. In Ecuador, one farmer claimed simply: 'There are no good roads. To get the products out of the farm you have to use horses, but those who don't have a horse cannot do it.'<sup>3</sup> In Malawi, participants in research identified poor roads as a major problem in all but one of the ten communities visited. In Twabidi, Ghana, farmers complained of the high transport fees charged by truck drivers because of poor roads. As a result, a large share of food crops was locked up on farms, leading to post-harvest losses.

In Asia, high concentrations of rural poverty are found in remote hill and mountain regions. Chinese farmers living in rural areas close to cities with dense transport networks had higher incomes than those in remote locations, and much of their income came from non-farm industrial enterprises. In the Philippines, the incidence of poverty in upland areas is 61% compared with 50% in lowland areas.<sup>4</sup>

Remoteness and poverty go together especially in Africa. In areas such as Northern Angola, Northern Zambia, Southern Tanzania and Northern Mozambique, all isolated areas with weak market integration, up to 90% of the population are estimated to be chronically poor. Similarly, in the highland maize belts of Kenya and Tanzania, chronic poverty is not strongly linked to farm size but is concentrated among food crop producers in remote areas with poor road access. One study in Tanzania has estimated that households within 100 metres of a gravel

road, passable 12 months a year with a bus service, earn about one third more per capita than the average.<sup>5</sup>

In Africa in particular, road quality is also a problem. Rural Africa has much lower population densities than rural Asia and lower road densities (population per road length and road length per area). But even where roads do exist they are often in a poor state: in Tanzania in 1990 only 24% of roads were in good condition; in Kenya 32%. Many roads are impassable during rainy seasons, which is often the peak season for raw material availability, affecting for example Tanzania's cashew nut industry and Kenya's dairy industry.<sup>6</sup>

High transport costs from the combination of scarce and poor roads in rural Africa make parts of the rural economy only semi-open and are the largest source of marketing margins, accounting for most of the 40% difference between marketing margins for food grains in Kenya and Malawi and those in Bangladesh and Indonesia.<sup>7</sup> The increases in commodity prices between farmgate and border, and in imported input prices between ports and rural areas, reduce incentives. Problems are particularly acute for areas specializing in roots and tubers (which are important in the forest and humid Savanna zones of coastal and Central African countries), as these have higher weight/value ratios and are more perishable than grains. Remote cassava-growing areas, while protected from cheap imports in local markets, find it difficult to compete in cassava chip exporting unless 'remoteness' can be reduced. Transport costs and storage constraints are particularly important for women, who tend to trade locally in vegetables and other perishables. Women in the Sahel who are involved in marketing vegetables are faced with massive oversupply in the local markets in the dry season, due to a lack of transport to urban markets and an inability to conserve produce for later sale.<sup>8</sup>

In Central and Eastern Europe and the newly independent states, poor farmers are also by and large those who live in mountainous and other remote areas, mostly at altitudes above 600 metres, notably in Romania, Albania, Armenia, Azerbaijan, Bosnia and Herzegovina, Georgia and Macedonia. Often entire communities live in extreme poverty: in the upland Bagrarnian District of Armenia, 92% of farmers could not afford minimum requirements for food, heating and cooking fuel.<sup>9</sup>

In Latin America, too, remote areas face physical market access problems. In Peru, high transportation and storage costs attenuated price changes of potatoes following liberalization.<sup>10</sup> In Chile, consumer prices vary enormously throughout the country. In the extreme north and south, consumer prices are on average 20-25% higher than in the central zone and metropolitan area.<sup>11</sup>

Difficult market access restricts opportunities for income generation. Remoteness increases uncertainty and reduces choice: it results in more limited marketing opportunities, reduced farm-gate prices and returns to labour and capital, and increased input costs. This weakens incentives to participate in the monetized economy, and results in subsistence rather than market-oriented production systems. By contrast, improved infrastructure affects fertilizer and other input use, raising the responsiveness of producers to changes in prices and increasing market integration. In Africa villages with better physical infrastructure have fertilizer costs 14% lower, wages 12% higher and crop production 32% higher than villages with poor infrastructure.<sup>12</sup>

The physical costs of market access can be reduced by road construction, road maintenance, and improved transport, storage and information. Governments and donors have traditionally favoured building new roads which allow easier transportation of all produce, not just that of the rural, remote poor, to ports and markets within and beyond country frontiers. In 1995, Uganda

successfully negotiated for a World Bank loan to build new roads rather than new primary schools, arguing that new roads would immediately raise national income and alleviate poverty, while the effect of primary education would not be felt until the medium or long term.<sup>13</sup> Certainly the poor in Africa regard new and/or improved roads as among the most successful initiatives to improve market access. In the Central and Nyanza provinces of Kenya, roads were most often cited as the most useful of government services. In Ghana and Côte d'Ivoire, rural roads ranked higher than educational needs, health and water supplies. The construction in Nigeria of a road from a village to the market centre provided the impetus to increase production.<sup>14</sup>

New roads do bring large benefits to poor, remote communities, in several ways (see Box 5.2 on estimating rates of return to roads). Rural roads improve market access not only for the rural poor but also for the less rural poor and urban population, opening up markets for both urban and rural producers and consumers. They encourage diversification in village economies by opening up the market for labour, artisanal products and agricultural produce. Road provision in Nepal and Bangladesh led to an influx of education services and provided access to health care in a wider area. In Egypt, villages enjoyed an increase in non-farm employment and in post-primary schooling availability when connected to a road network. In Sargodha district, Pakistan, unemployment decreased when a new road created opportunities for drivers, conductors, mechanics, filling stations, shops, tea-stalls near bus stops and other services for travellers.<sup>15</sup>

In India, Kenya and The Sudan, production improved through both intensification and specialization, though the extent of these varies across countries.<sup>16</sup> The use of commercial inputs like fertilizer and pesticides generally decreases with distance from the market, but differences are most

**Box 5.2: Rates of return to road building**

In India rates of return to road building have been estimated to be around 25%. But, just as for other types of investments, there are difficulties in estimating the rates of return to road building.

One of these arises from **mutual causation**: villages may be poor because they lack a road linking them to other villages or towns, or because they are in so-called 'unfavoured areas', with poor soil quality, low rainfall or lack of irrigation. Their poverty may prevent or deter a road from being built: villages may not be able to afford to build a road, if funded solely through local taxation; or the expected benefits of building the road, in terms of increased output, may be less than the costs. Adjusting for this mutual causation problem lowers rates of return to around 15-17% in India (Binswanger *et al.*1993).

A second difficulty arises from **trade diversion**. Some of the gains that accrue to a village through building a road connecting it to another village or a town may come at the expense of other remote villages which do not get a road and lose some of their already small market share. So far this difficulty has not been addressed, but it surely reduces rates of return further, bringing them closer into line with other investments.

notable for poorer rural people, especially in India. In The Sudan, the share of high-value perishable goods (fresh fruit and vegetables) increased, while the share devoted to dry, low-value crops fell, among all farm sizes.

In Malaysia, new roads greatly affected prices of food and inputs: trader vans started servicing roadside communities, and roadside shops had to reduce their prices. Food-crop production was also affected. In roadside villages, employment opportunities increased, offering an alternative source of cash income; paddy production fell, while off-road villages stepped up their hill paddy production to meet rising demand from the roadside villages.<sup>17</sup> In Sri Lanka, feeder roads in Kegalle had a positive impact on rural development: land value increased by over 700% along the Hingala/Gogagama road within two years. The distance for a large village of 9000 people to the main Colombo/Kandy road was reduced from 20 km to 1.8 km when a more direct road was constructed; cart tracks were made accessible to motors, resulting in improved marketing and reduced vehicle hire rates; 97% of respondents claimed that the roads had improved their marketing prospects, resulting in higher prices for their agricultural products and lower prices for their consumer goods. In addition there was a quickening of eco-

nomic activity along the roads in the form of building construction, stalls, tea-kiosks and other services within two years.<sup>18</sup>

In Bhutan, feeder-road construction also had positive impacts on rural development. Extension workers on the IFAD-supported Tashigang and Mongar Area Development Project said that farmers were stimulated to take up extension opportunities and increase their use of inputs, credit and improved agricultural practices now that new roads gave them access to markets to sell their crops. In addition, the roads provided the only means by which farm families could reach health and education services, improved community life (through facilitating visits to friends and relatives) and better access to consumer goods.<sup>19</sup> Jacoby<sup>20</sup> argues that in Nepal the provision of extensive road access to markets would confer substantial benefits on average. Blaikie *et al.*<sup>21</sup> show that east-west roads were good for rural poverty reduction, through improved local market integration, but north-south road building was not, as it had the effect of subsidizing marginal-cost sales from India and China. However, recent moves to export horticulture to India will benefit from the north-south road.

The Nepal case suggests that the benefits of new roads would accrue mainly to landowners, not the

very poor. However, the poor will also gain even if roads are not a targetable commodity and income inequality rises. Of course, the public nature of roads helps – roads benefit all members of the community, including women and the poorest, even if they do not gain as much as the rich – although the type of transport, timing and pricing may determine whether roads are *de facto* accessible to the poor.

One of the choices in improving physical access to markets is between building new roads and maintaining existing ones. Poorly maintained roads, however extensive or uncrowded they may be, will not meet the needs of rural populations. The World Bank estimates that returns on primary highway maintenance projects are almost twice as high as those on projects involving new construction.<sup>22</sup> In Tanzania, which has many miles of ‘roads’ per 1000 people, only 10% of rural roads are deemed to be in good condition.<sup>23</sup> In Zambia, the negative effects of removal of maize subsidies for remote rural producers have been exacerbated by poorly maintained roads, which prevent people in remote, rural areas from being able to access markets for inputs, outputs and consumer goods.

Maintenance of rural roads can have important effects on incomes and livelihoods of the rural poor.<sup>24</sup> The Rural Maintenance Programme in rural Bangladesh in 1984 aimed at maintaining earthen market roads using rural female labour. Market expansion associated with road maintenance resulted in an increase in food services, bicycle repair services and rickshaws on roadsides.<sup>25</sup> In Chile, during the 1980s, public employment schemes in poor rural areas, including maintaining roads, provided significant contributions to household income, reducing poverty and inequality.<sup>26</sup>

### Market structure

Many rural markets are characterized by extreme asymmetry of relations between, on the one hand,

large numbers of small producers/consumers and, on the other, a few buyers/sellers. Such market relations are inequitable, frequently uncompetitive, and rarely to the advantage of the small producer. Such market relations result from a number of factors. First is the physical aspect discussed above: either a complete lack of roads or roads that are impassable at crucial times of the year, which result in high transport and transaction costs, both to buyers and sellers. Second is the issue of market scale. Many rural communities, particularly those in more remote areas where population densities are low, have such limited demand for production inputs, or have so little to sell or barter, that traders do not find it worth their while to visit them.

Third, it should be recalled that farmers in many parts of the world, certainly prior to liberalization, were dependent on the government or on parastatal organizations to purchase their produce at a preset price. These marketing boards aimed to repress farm prices so as to keep consumer prices down. While keeping consumer prices for food staples low is one way of helping the poor, including many of the rural poor who are net food purchasers, it is far from the most efficient. Pan-territorial pricing (fixed, uniform prices, irrespective of distance to markets), where non-remote producers effectively subsidize remote producers, penalizes both rich and poor non-remote farmers with surpluses to sell. Relative prices, incentives and the farm-product mix, are all distorted by instruments of farm price repression.

Liberalization aimed to achieve efficiency gains through market determination of prices. It was predicated at least in part upon the assumptions that the withdrawal of the state from those activities in which it formerly engaged (input supplies, production support and financial services, produce marketing) would create the space for the private sector to enter, and that the private sector would operate more efficiently than the state. Progress in achieving market liberalization is now

substantial, especially for food crops. With rare exceptions, domestic food markets for staple food crops have been almost completely liberalized, with impacts on producers and consumers generally viewed as favourable.

But the experience is mixed. In much of Southern Africa private-sector development has been slow and faltering, and the withdrawal of the state has resulted in a vacuum, which has not yet been adequately filled by the private sector. In other areas, the private sector has readily stepped into the gap temporarily created by state withdrawal from food crop marketing and processing. In West and Central Africa, the World Bank<sup>27</sup> judged that of 19 countries where agricultural policy reforms had been initiated during the 1980s, government intervention could be classified as either strong or moderate in 13 of these prior to reform for selected food crops. After reform in late 1992, only one country maintained a moderate level of intervention; the rest were characterized by zero public intervention, with the possible exception of maintenance of food security stocks. The exercise is considered to have been largely successful, particularly in the Sahelian countries, where the private sector has moved in fast to fill the gap created. The impact of liberalization of input markets has, by contrast, been far less successful, and has been associated with a decline in input use, with negative implications for sustained increases in agricultural productivity.

While reforms in many cases have no doubt been beneficial to non-remote farmers, large and small, and to farm labourers through increased employment and/or wages, farmers in remote areas have in the short term been left worse-off (Box 5.9). The contraction of the former market chain has left many farmers further from markets than they were previously: in northern Mozambique for example, the median distance to a market is today 20 km.<sup>28</sup> Removing the state buyer pushes the onus of marketing on to the farmer: under-

investment in rural infrastructure, as in Zambia, means that often there is no buyer at all for their produce, or if there is a buyer, prices are extremely low because of the high physical transactions costs.<sup>29</sup>

Rural producers and consumers who face high physical costs in reaching markets often become dependent on traders coming to the village. Traders are essential lifelines for remote rural people, providing opportunities to sell agricultural produce and to purchase inputs and consumer goods. Small private traders also face high transaction costs arising from physical remoteness, which affect demand for small farmers' produce and the prices they receive (see Box 5.3).

In remote or flood-affected areas a trader may not arrive reliably or at all, and may well have monopoly and monopsony power when he/she does: farmers are then faced with little choice but to accept the first offer of the first trader who shows up, however unfavourable it might be. Also, rural people can become dependent on rural traders for information about agricultural products, supply of inputs and consumer goods, and price. Traders, especially if irregular or facing little competition, may be little concerned about reputation, and in such cases asymmetric information often forces the poor to accept low prices for products and to pay high prices for consumer goods. It is often hard for the poor to distinguish this effect from the already damaging effects on prices of remoteness and bad roads. Poor and remote people are more likely to be disadvantaged by non-contestable markets in this way: large farmers, or those closer to markets, can gather information more readily on prices and supply and demand conditions, and transport their produce to market themselves. In Zambia and Zimbabwe traders are often willing to engage only in barter rather than paying cash.<sup>30</sup>

In countries such as Zimbabwe, Zambia and Mozambique, with the privatization of the paras-



**Box 5.3: Private traders in Zambia**

Most trade in Zambia's Northern Province is through small independent traders who take cash or goods to barter, such as used clothing, soap, salt and blankets. Private traders in remote areas of Zambia face high transactions costs, including time and energy spent buying goods from farmers and hiring labour and transport to carry produce. Traders will travel to an area by public transport and often spend between two and three weeks in the area, camping overnight and travelling on foot between isolated villages buying small quantities of produce from farmers, until they have enough produce (beans, groundnuts or maize) for trade. The trader has to pay local labour to carry agricultural produce to the roadside, and the cost of hiring a truck to move purchases from the roadside into town is a substantial component of his costs.

Transaction costs of trade with remote villages are so great that it is often cheaper for large purchasers (such as maize mills) to buy from distant commercial growers than from small farmers located in the region.

*Source: Winters 2000.*

tatal commodity marketing agencies, there has been rapid expansion in export crop complex, with smallholders producing crops, particularly cotton, for sale to large agro-business concerns. However, monopolization of processing, credit, marketing and technical capabilities by the large companies makes the smallholders' re-entry to the market fundamentally inequitable. Although experiences have varied, and there are clear examples of companies acting with enlightened self-interest, smallholder farmers have in some cases found themselves unable to negotiate or withdraw their business, effectively operating as employees rather than as partners. They have ultimately derived very low net returns as the large-scale private buyers exercise economic power to take the lion's share of value added. This offers a scenario of growth of smallholder production without smallholder development.

In the case of production inputs, the problem is particularly complicated: the commercial firms that have replaced the parastatal input distribution companies have a very limited retail network in the interior and are only starting to develop their networks of agents. To the extent that the inputs get to the rural communities, the range is in many areas still limited (although perhaps increasingly based on demand), and the costs are high, both relative to what farmers have been used to paying – reflecting the removal of subsidy, and in absolute

terms – as the result of high transport costs, lack of competition amongst distributors, and farmers' lack of ability to negotiate favourable terms. In Mozambique the situation is particularly limiting: inputs are frequently in short supply, as traders prefer to deal in goods that are easier to transport and more profitable than most farm items; and, partly owing to the lack of available farm purchases, only 7% of farmers use fertilizer and, even less, improved seeds.<sup>31</sup>

One of the ways in which market structure can be influenced to promote greater competition, transparency and improved access of the rural poor to markets, and the terms and conditions upon which they interact with it, is to support the market intermediaries themselves. Over the past few years, a number of important and innovative programmes have been developed to do just this. For example, the Co-operative for Assistance and Relief Everywhere (CARE) in Zimbabwe has since 1995 been implementing a programme which seeks to facilitate the access of the rural poor to agricultural inputs, output marketing opportunities and improved agricultural know-how, through the establishment of a network of community-based, independent agri-input dealers. The programme, initially supported with seed funding from IFAD, has over the five-year period successfully established over 300 dealers: these have established commercial relations with the urban agri-input suppliers, and

are each supplying farm inputs and other household provisions to between 100-200 smallholder farm families. The farmers are the most important beneficiaries of the programme: they are able to purchase inputs where they want, when they want and in the quantities they require. The effective prices they pay for the inputs are lower than formerly and, through their relations with the agents, many are able to purchase the inputs on credit.

In many countries, commercial banks provide little credit to rural traders. While some NGOs and non-bank financing agencies provide credit, the need far outstrips the supply. On account of its itinerant nature and the large size of established trade networks, rural trade is a marginal concern of the microfinance plans in many countries. Supplier credit offers an attractive alternative source of finance for cash-strapped rural retailers who do not easily qualify for a bank loan. The strategy of training rural traders in business management and helping them develop a commercial relationship with input supply or wholesaling companies can overcome this constraint.

#### *Lack of skills, information and organization*

Liberalization has substantially changed the environment in which smallholder producers operate, from one in which the production options were limited and the prices of inputs and produce were known, usually before the start of the growing season, to one which is open-ended and in which all prices can vary from day to day. In their dealings with this market, smallholder farmers find themselves at a major disadvantage.

Poor farmers in many areas do not understand how the market works or why prices fluctuate; they have little or no information on market conditions, prices and quality of goods; they are not organized collectively; and they have no experience of market negotiation and little appreciation of their capacity to influence the terms and conditions upon which they enter the market.<sup>32</sup> To the

extent that they have had contact with government agricultural extension services, they have received little guidance on these issues, as the services have tended to pass technologies with little reference to markets and prices. With no information, no experience and no organization, they have no basis upon which either to plan a market-oriented production system or to negotiate market prices and conditions, and are obliged to take the first offer made to them. Ultimately, their lack of knowledge means that they are passive, rather than active, players in the market; that they can be exploited by those with whom they have market relations; and that they fail to realize the full value of their production.

Since the early part of the twentieth century, marketing cooperatives (MC) have been considered an important vehicle to enable farmers to take advantage of economies of scale in transportation and storage so as to reduce the cost of marketing produce. Politically, MCS can give farmers greater control over trading activities than reliance on private traders alone, particularly in remote areas where traders may have considerable market power and greater bargaining power *vis-à-vis* traders. MCS enable farmers to raise their profit margins through reduced costs of marketing their produce and increased selling prices.

The experience of MCS in developing countries has been mixed. Many farmers have increased their profits by joining an MC, and MCS have provided employment in rural areas. In Nigeria, this has stopped the migration of young people to cities.<sup>33</sup> The building of cooperatives among women who weave screwpine mats in Kerala has helped them by stabilizing prices, organizing marketing and obtaining bank loans.<sup>34</sup> However, in numerous countries, during the 1960s and 1970s governments sought to influence, co-opt or directly control cooperative movements, generally with disastrous consequences. Problems would then arise from mismanagement through lack of busi-

ness skills and training, lack of finances, corruption and state interference. For instance, the Cooperative Movement in the 1970s in Tanzania experienced misappropriation of funds, nepotism and corruption by the elite, and was disbanded in 1976.<sup>35</sup> In Cameroon some MCS had monopoly positions, leading to similar treatment of coffee and cocoa farmers to that by private traders.<sup>36</sup>

By the 1980s, the term 'cooperative' had come to be held in contempt by many farmers, particularly in Africa, who often saw them as nothing more than a particularly coercive and intrusive arm of government. However, with the liberalization of markets, there is renewed recognition of the importance of farmer organization and, in a number of countries such as Mozambique (Box 5.4), Uganda and Zambia, major efforts are being made to strengthen smallholder groups and associations.<sup>37</sup> Smallholders acting alone typically lack

the bargaining power to command on-time delivery of agricultural inputs at reasonable prices. By combining their needs for agricultural inputs, the group creates a larger and more important target market for vendors of seeds, agro-chemical inputs, market planning information, farming tools, land-preparation and harvesting services, post-harvest handling technology, credit and storage opportunities. For produce marketing, too, association provides enormous advantages: farmers who join a group can exercise more power when bargaining for sales terms and so enter into forward contracts for production, thereby offering improved access to future markets. Officially registered associations can enter into formal sales contracts: even those groups or associations still pursuing the process of formal registration enjoy better access to markets.

The key to success of group action (cotton primary marketing organizations in southern Mali,

#### Box 5.4: Rural group enterprise development in Mozambique

The Rural Enterprise Development Programme is a pilot initiative, designed and since 1995 implemented by the NGO CLUSA (Cooperative League of the United State of America), which is aimed at assisting Mozambican smallholders to develop a network of rural group enterprises (RGE) in order to increase agricultural productions and rural incomes. The programme is designed to provide services to RGEs and farmer associations in the areas of institution building, business management training and advice, functional literacy and numeracy training, auditing, market information and agricultural commodity broking, savings and credit training and information. To date, some 370 RGEs have been established, with a membership of around 13 000 members.

Numerous interviews with group representatives and input supply companies revealed that organized groups of farmers are more likely to receive more timely supply of their seed requirements at the beginning of the planting season. CLUSA notes that 'One of the most important initial impacts of the RGE development process has been increased access to markets and improved transportation by rural producers for their produce. For the first time in 1996 and every subsequent year, producers were able to negotiate the prices of and market their own produce'. It also found that RGEs were able to obtain premiums on the prices at which they sell agricultural produce: cotton-buying companies are known to pay premiums of between 4% and 12% to groups and associations, in return for the group or association handling some of the company tasks such as gathering the cotton into warehouses, weighing, performing quality control and loading company trucks. An added benefit for the group in such an arrangement is better control through participation in the grading and weighing process, thereby lessening instances where farmers feel they have been unfairly treated. Even absorbing some of the premium to support the group infrastructure of personnel and facilities, the farmer members realized premiums over non-group prices. Cotton is not the only product for which organized farmer groups can obtain premiums for smallholders. CLUSA found that during the 1996 marketing season prices received by associations were 22% higher for maize and 93% higher for groundnut than the prices paid to individuals.

Source: CLUSA Rural Group Enterprise Development Programme, quarterly reports (various)

farmer groups at village level in Ségou, Mali, producer organizations at village level in the Centre Province of Cameroon) is the establishment of small-scale groupings in homogenous structures, with a particular purpose and where a sure market outlet is available.

#### Market information

The lack of market power that farmers experience (and complain about) when dealing with rural traders can be due to lack of market information, both in terms of price and price trends. This disadvantage is amplified when farmers are faced with a single buyer for their product. Farmer groups or associations can overcome this problem, in part at least, by canvassing a number of buyers with the promise of delivering a large quantity of uniform quality. Thus, delivery of more information on markets and prices has been shown to assist farmers with farmgate marketing decisions, particularly when faced with a single buyer.

Provision of market information, linked to training to help farmers to interpret and act upon that information, can also help them to understand better marketing processes and to develop strategies to achieve better and more stable prices for their agricultural produce. However, such information must be location-specific; it must be timely and accurate; it must be dynamic (track trends as well as absolute levels); and it must be locally available and in a language that is understood by all of the rural population. While government-run market information systems operate in many countries, few have adequately met the challenge of all the requirements associated with the information delivered.

#### Market information systems

Improved communications can also play a part in reducing informational asymmetries. The village pay-phones used by the Grameen Bank in Bangladesh were found to lower transaction costs

#### Box 5.5: Grameen Bank village pay phones

The Grameen Bank in Bangladesh started the Village Pay Phone (VPP) initiative in the mid-1990s: cellular phones were leased to poor rural female Grameen Bank members in order to provide a communication service to poor and non-poor rural dwellers alike. The cost of phones are paid for in weekly instalments over a three-year period.

A study of villages with VPPs within 50 km of Dhaka found the initiative to be pro-poor on a number of counts. While 50% of non-poor VPP users had used a phone within the last five years (before VPPs were introduced), only 40% of the non-poor had used one. Furthermore, absence of a VPP was found to result in greater transactions costs for the poor than the non-poor, through the need for the poor to be physically mobile and less likely to take up other sources of telephone service than the non-poor. Although 85% of the VPP users were non-poor, profits for (poor) owners amounted to between one fifth and one quarter of household income. This increase in household income meant improved food security, a greater ability to invest in health, education and clothes for children, and an increased propensity to save.

The phones have an impact on economic and socio-cultural spheres of users and owners. The presence of a phone in a village makes information about input and output prices readily accessible. As a result, prices of agricultural commodities such as paddy, eggs and vegetables are higher in VPP villages. Owners of livestock can quickly receive warning of outbreaks of disease. During the floods of 1998, VPPs helped in the relief effort. Law and order has improved since it is now easier to inform the police when crime takes place. One tenth of calls are health-related, enabling villagers to call a doctor or ambulance quickly. Kinship networks have been strengthened, particularly in villages with many overseas migrant workers. Empowerment of women is also evident. In addition to increased mobility around the village on receiving incoming calls, owning a phone increases prestige and respect within the village. Moreover, through receiving and overhearing calls, phone owners are able to expand their own knowledge about economic and social issues.

*Source:* von Braun *et al.* 1999.

**Box 5.6: Commercialization and the rural poor**

The move to commercial crops can bring about changes in a community that are not always to the benefit of the poorest. There are a number of scenarios where the poor might lose from commercialization.

Scenario	Consequences
(1) Inelastic demand	Declining prices: good for net food buyers, bad for net food sellers.
(2) Food production decline	Net food exports fall, or net food imports rise: bad for net food purchasers.
(3) Risk aversion/information	Delayed use of new technology among small farmers can lead to exclusion in markets.
(4) Weak tenancy contracts	Landowners evict tenants when new profitable cash crops are planted, leading to increased landlessness, malnutrition.
(5) Market distortions by state	Farmers plant inappropriate crops or are excluded from key crops in favour of large farmers.
(6) Gender roles	Traditional 'female' activities may not be compatible with market activities required by commercialization; increased employment by women may lead to increased use of child labour and poorer school attendance.

*Source: Binswanger and von Braun (1991)*

and to enhance the empowerment and status of women and households that leased phones as well as improving law-enforcement and communication during disasters (Box 5.5).<sup>38</sup>

**MARKET ACCESS AND COMMERCIALIZATION**

It is increasingly apparent that continuing exclusive emphasis on food crop production will not allow the agricultural sector to achieve the growth levels necessary for a significant impact on rural poverty, or generate the cash needed to sustain the development of economic and social services. Once food surplus is achieved, further increase of rural incomes and broad-based economic growth all hang squarely upon the ability of smallholder producers to diversify their production systems, base their production decisions on changing market opportunities, and so participate in the rapidly expanding cash crop complex. Such recognition is increasingly reflected in the agricultural sector policies of developing countries, many of which today give explicit attention to the commercialization of production systems.

There is also evidence that regions that produce commercial crops are generally better-off than regions under subsistence production, and that the poor in these regions are also better-off and have more secure jobs.<sup>39</sup> However, commercialization also poses challenges to producers beyond those of reaching the local market place or obtaining a fair deal from traders (see Box 5.6), and in the absence of an appropriate policy environment, it may even have a negative impact upon the poorest rural households. Reardon<sup>40</sup> establishes three groups of smallholders 'going commercial' in terms of welfare change. Commercialization most helps the group characterized by easy access to urban and export markets, infrastructure, human capital, technology and risk assistance. An intermediate group has moderate access to urban and export markets, close to the minimum requirements imposed by agro-industry companies, and lack of adequate capital, credit, technology and risk arrangements. An unfavoured group is in the hinterland, with very poor agroclimate, low access to technology, and almost no access to modern education, risk management or credit.

Traditional food crops produced for own consumption and local markets are still largely the domain of women in many developing countries. However, the growth of cash-cropping has in some cases increased the burden of women who work on their male relatives' cash-crop farms for no or little pay. Landless women in a coffee-producing area of Kenya set up collectives to produce bananas and vegetables to sell independently in local markets in order to control their own labour and benefits of production, as coffee prices were dwindling during the 1980s and women received less payment for their work on coffee farms.<sup>41</sup> Changes in crop-mix and/or changes in production can also influence who controls production: when rice in The Gambia became a crop with irrigation – also requiring market inputs such as fertilizer – and yielded significant marketed surplus, rice fields moved from women's to men's control.<sup>42</sup> However, as commercialization and agro-processing expands, women tend to be linked to the market through employment in such industries rather than being involved in trading themselves. This brings with it new obstacles and issues of working conditions, education, health and increased time burden.

Diversification is often prescribed as a way of reducing the vulnerability of farmers (particularly poor ones) to fluctuations in prices and production. However, poor farmers face difficulties in diversifying into or out of certain cash crops: for example, tree crops, including beverages, require long periods of gestation before providing a harvest; and rehabilitation of land, once the crop is discontinued, can take a long time. Delays in adopting new technology can mean foregoing opportunities when market channels have bottlenecks: for instance, the capacity of an established sugar mill may be filled up by the early users. The export vegetable cooperative in Guatemala has effectively stopped admitting new members because of concerns about bottlenecks in handling

and capacity for cold storage.<sup>43</sup> In some cases smaller farmers may be excluded from new technology altogether. Poor farmers appear to have been excluded from the Central American flower boom of the late 1980s owing to lack of access to credit and information, even though many of the crops were suitable for cultivation on small plots of land.<sup>44</sup>

While many small farmers see commercialization as the way out of poverty, few sacrifice food security. The importance of growing cash crops and food crops simultaneously is illustrated in a number of studies (including India, the Philippines, Guatemala and seven from Africa).<sup>45</sup> Households that engaged in cash-cropping generally saw increases in net household income, attributable to higher returns to land and labour. Few households boosted cash crop income at the expense of own-food production. If land was spare, they increased the total land area cultivated where possible and hired additional labour; if, as in most cases, no spare land was available but technology was, they either invested some of the income from their own cash cropping in intensified food production or used income from employment in cash cropping to intensify food production. So, in order to maintain food security, access was required to one or more key inputs: land, labour and technology. With land becoming more scarce, the strategy of using income from cash cropping (as farmers or employees on commercial farms) to intensify food production will become more important, emphasizing the need for access to technology, labour and other agricultural inputs.

Access to markets in assets (including land and water), technology and credit is vital for consolidating and expanding production. Labour markets are also important for the landless and those with insecure property rights and for those seeking to hire labour to increase production, including the very poor during periods of peak activity.

### *Access to water and water markets*

Access to water is crucial to agricultural development and poverty reduction, but markets for water for small farmers and the poor are often undeveloped or biased against the poor, who are often at the tail-end of irrigation systems.

In dry areas, water markets may provide access to water. Non-market allocation of water, often preferred by the state, has often been used to maintain control by 'despots' over a water-dependent populace or to appease the rich and powerful; further, prices have often not reflected the full opportunity cost of water, removing incentives to use irrigation only when it yields good returns, and resulting in gross waste.<sup>46</sup> There is a growing consensus, spurred by worsening water scarcities, that water markets, with full market pricing powers, are needed to tackle this, and to shift water to users and uses with the highest returns.<sup>47</sup> Water markets can encourage farmers to raise efficiency, to shift to high-value crops,<sup>48</sup> and to raise yields – rightly subject to their net value at the margin exceeding the marginal cost of water. The cost of available water induces farmers to adjust the amount and timing of supply to crops, and water providers to allocate water where it produces most returns and hence most farmer custom. Normally water trade gives economic gains to both seller and buyer: the seller can increase profits, while the buyer can access water relatively cheaply and easily, as competition encourages availability and low prices. But removing subsidies would have strong detrimental effects on users, especially the poor, which will require careful transition arrangements until returns are realized and safety nets established.

Water markets, both informal and formal, can be especially helpful to the poor by enabling them to acquire water without taking risks, or borrowing, to invest in water-yielding assets or to commit to specific technologies.<sup>49</sup> In the Pakistan Punjab and North West Frontier Province, only 15% of farmers own tubewells, but one third of these sell

some of their water, securing access for those who would otherwise lack water for irrigation.<sup>50</sup> However, unregulated markets can help the poor less than the rich if the poor are less mobile or informed and thus less able to overcome barriers to access, information, or competitive suppliers. Further, market sales of water tend to settle down at prices that neglect the impact of the water use on third parties – for example, through increased scarcity,<sup>51</sup> salinity, waterlogging or pollution – especially if such third parties are many miles downstream, or too poor to transact. There are also practical problems. Some legal systems (like Roman-Dutch law as applied in Sri Lanka and until recently South Africa) give water rights 'from Heaven to the centre of Earth' to landowners, conflicting with efforts by downstream users' groups or the state, to account properly for water use as third parties. Elsewhere, custom rejects water pricing or even ownership – which sometimes safeguards sharing norms that protect the poorest in droughts, especially in remote communities. And there are technical difficulties in measuring water use (area, volume, or crop-specific), especially of flows across paddy land, and the opportunity-cost of water at different times.

In much of South Asia, informal water markets are well developed. In Northern India they usually involve trade between farmers on a watercourse, enabling them to balance supply and demand needs among themselves in each growing season at a time. Informal groundwater markets have helped the small-farming poor in Pakistan, buying from larger farmers, and the near-landless poor in Bangladesh, managing well-water and selling to poor farmers (Box 5.7). This can contribute to equity within the community.<sup>52</sup> Chile and Mexico have pioneered the development of formal water markets by introducing tradable property rights.

However, market access is not a perfect substitute for claims on assets. Farmers who actually own a tubewell benefit more than a water buyer,

since they have earlier and stronger claims on water use. But it does not follow that providing poor farmers with credit to sink their own wells benefits them more than developing or formalizing water markets, since if water is unpriced and hard to buy or sell, the value of a well is reduced. In such conditions, owning a tubewell can reduce efficiency. Farmers overuse water because recurrent costs are low, especially where fuel is subsidized. They, or other poor farmers, with dug or shallow wells lose out if over-pumping causes the water-table to drop below the depth that they can reach, especially if they lack funds or credit to deepen the well, as in Tamil Nadu, India, early in the Green Revolution.<sup>53</sup>

So the water-yielding assets of the rural poor work best with water markets; and the poorest need water markets. Poor farmers are willing to pay large amounts for a reliable water supply for irrigation and, in the absence of a water market, these amounts find their way to allocators as bribes, with resulting corruption, centralization of funds and uncertainty. Many farmers pay in kind, often with water sharecropping. In India, in

North Arcot district, farmers pay for their water with one third of their crop;<sup>54</sup> in Andhra Pradesh, water sellers provide the water and half the cost of fertilizer while the landowners provide land, labour and the other half of the fertilizer, sharing the produce equally.<sup>55</sup> Such flexible share arrangements adjust to local risks and supervision costs in formal water markets, just as they do in informal markets for rented land,<sup>56</sup> so helping the poor, who are the most risk-averse, and who have least labour supervision costs.

Often, informal water markets involve a simple one-off exchange: a fixed water volume, time, or area irrigated, against fixed cash or crop, or crop-share. Yet such informal markets are not always equitable. The location-specific nature of water, flows, and user farms and houses can create local monopolies. High prices often reflect monopoly access by water-asset-owners, including rich farmers, and can impede access for the very poor. In addition, third-party effects and externalities cannot be controlled as such markets are not regulated. Establishing formal markets through tradable water rights could reduce these negative

#### Box 5.7: Water sellers in Bangladesh

In rural Bangladesh, the NGO Proshika set up a project for groups of landless people to sink wells using local credit suppliers. The incomes of these water sellers have increased; some are now providing credit to small farmers; and their position in society has improved as their control over water resources gives them leverage over farmers when dealing with other issues. Farmers who buy water in this market are happier as this direct, one-to-one contact eliminates conflict (over distribution, labour inputs, operation and maintenance costs) with other farmers with whom water resources had previously been shared. Poor farmers are no longer tail-enders in irrigation schemes, but have equal access to water, provided they are able to pay.

Furthermore, they can interact with the landless water sellers on more equal terms, whereas before they may have always been the losers against other, richer farmers participating in their irrigation scheme. Increased control over irrigation water enables poor farmers to make a higher number of applications to their crops, which should produce higher yields. This has also created employment, especially in the winter rice season.

However, problems do exist, which can negatively affect equity. As the water sellers are largely paid for water in the form of crops per hectare, there is a bias towards providing water to farmers who produce higher yields per hectare, and these tend to be less poor. Also, when landowners have taken note of the higher yields secured by access to water markets, they tend to push poor tenants off the land in order to farm it themselves, or let it to richer farmers, as the presence of reliable water provision increases the value of the land.

Source: Wood and Palmer-Jones 1991.



aspects of informal markets, while promoting the advantages.<sup>57</sup> For example, enforcing laws and introducing regulations could help prevent monopoly power. Implementing reforms could stabilize informal water markets and work in favour of the poor.

Water pricing is inevitable where water markets exist (though the price may be 'wrong', reflecting monopoly or other price distortions,<sup>58</sup> or neglecting externalities), and normally desirable even where water is allocated otherwise. Water should be treated as an economic good and its price should reflect its true value. Price setting by the state or regulated private utilities should ideally reflect long-run marginal water supply costs, including transaction costs and third-party effects which can adversely affect the poor in particular. Otherwise, poorer farmers can lose out to better-off farmers both relatively (richer farmers can afford to buy more water than poorer farmers) and absolutely (lowering the water table through overpumping of the aquifer by owners of tubewells, who tend to be better-off, means that the poor with shallow wells may no longer be able to access water). Volumetric pricing, used in some areas of India and Jordan, is normally efficient, and stimulates farmers towards efficient water-economizing choice of crop cultivated. However, due to the high cost of setting it up, volumetric pricing may be limited to public irrigation systems. Area pricing, or paying for water per hectare irrigated, may therefore continue to be popular for small-scale systems. The pricing of water using this method needs to be reviewed in order to achieve more efficient use. Normally the poor will gain from it; if they lose, they should be compensated by means that do not further stimulate water overuse.

Subsidies to the poor to protect them from higher farm water prices are difficult to target well, given that the rich farm more land, tend to use more purchased water per hectare and are politi-

cally well placed to divert subsidy. Also, subsidizing scarce resources encourages their overuse and ultimately rations them against the poor. Inequity is exacerbated where, as often, water subsidies are financed from regressive taxes. In Nigeria, 50% of subsidies were given for inputs and services for wheat cultivation, but dependent on a certain area of land being available for cultivation. This excluded poor farmers with small farms and deterred the expansion of irrigation.<sup>59</sup> In India only around 10% of irrigation subsidies in the mid-1980s ended up in the hands of the poor.<sup>60</sup> Subsidy on water-yielding assets is less likely to stimulate wasteful water use than is subsidy on purchased water itself, and can be confined to small and labour-intensive assets used mainly by the poor.

#### *Labour markets*

Access to labour markets is particularly important for many of the poor, who are highly dependent on their labour power. In many countries income from hired labour has become an important source of income (Box 5.8). Demand and supply factors account for this. For example, land subdivision may result in unused family labour and at the same time reduce the household's ability to subsist, while monetization of the local economy may induce an inflow of non-food goods and enhance a household's desire for cash. Commercialization, agro-industrialization and agri-exports have increased demand for labour in rural areas in some countries, particularly for women, although much of it is seasonal. Furthermore, the poor are particularly vulnerable to market conditions; for them, a decline in real wages or an increase in unemployment can be disastrous.

The ability of the poor to participate in the labour market is subject to a number of constraints arising from remoteness; lack of access to other assets, such as education; lack of participation in institutions such as credit groups; household characteristics such as family size and com-

**Box 5.8: Wage labour and the rural poor**

Often the rural poor are employed in farming, especially where there is skewed land distribution. Participation in the labour market is greater for those with few household assets, including land. Agricultural workers are vulnerable to seasonal change which influences agricultural labour demand throughout the year. Casual workers tend to be employed during peak labour demand, for example for weeding, ploughing and harvesting. Their wage may be higher than that of permanent workers due to the convenience of hiring labour only when needed and at a time of high demand. Opportunities are increasing for wage labour in non-farm work, particularly as rural financial markets become more established, allowing expansion of non-farm activities. Migrant labour is common in rural areas, with many households receiving remittances from members working in other rural areas, in towns and cities or in other countries. Cotton production in Peruvian coastal areas provides seasonal labour opportunities for those living in the rural Andes. The mines of Southern Africa are a good example of migrant labour both within countries and across international borders; remittances from mine-workers form an important part of household income and can be instrumental in maintaining the local economy.

Sources: Ryan and Ghodake 1980; Mukherjee 1994; Carter and May 1999.

position; cultural norms; and discrimination against women or ethnic minorities.

**Remoteness**

The provision of rural roads and transport can improve access to labour markets. In Colombia, rural road construction reduced out-migration as it improved access to urban amenities. In the Ecuadorian Andes, rural-urban migration was reduced by improved roads that facilitated the formation of small enterprises and increased access to urban amenities. The new road in Sargodha, Pakistan, while also providing new opportunities for the local population, facilitated migration, with around a quarter of those unemployed moving to urban areas.<sup>61</sup>

**Lack of assets**

Low access to land obliges many rural poor to work as hired labour. Levels of human and physical assets are important factors in determining earnings in labour markets. The rural poor are usually less educated and less healthy than the non-poor. Returns to education tend to be lower in rural areas than in urban areas, although the differences narrow once methods take account of migration,<sup>62</sup> as employment opportunities are typically in low-wage activities in agriculture. Low

coverage of social security systems, unaffordable private health insurance and lack of access to credit for smoothing consumption, oblige the poor to work even when ill. Low levels of productivity stemming from poor health attract low wages. This lack of access to assets forces labourers to rely on their employers for many services. In West Bengal, people are unwilling to work outside their own village, despite higher wages elsewhere, due to the trust and reciprocal information between workers and their employers from the same village, particularly when workers can call on their employer for credit provision and help in emergencies, and when employers can get extra work at times of crisis.<sup>63</sup>

**Discrimination**

Involving the poor in well-functioning labour markets not only leads to economic growth, but also helps them to a fair share of the benefits. However, labour markets do not always operate fairly, leading to disadvantage and exclusion of vulnerable groups. Gender wage differentials persist, even in urban labour markets in middle-income developing countries. Task-specific, productivity-adjusted gender wage differentials seldom exceed 10%,<sup>64</sup> but much more of the gender wage gap is due to female exclusion from rewarding tasks by

educational or customary discrimination. Where men and women participate in similar jobs, women often receive lower wages. In Mexican agro-industries women make up the bulk of the labour force in packing plants, but men receive higher wages for carrying out similar tasks.<sup>65</sup>

Ethnic minorities also face discrimination in labour markets. They can be doubly disadvantaged: discrimination early on in life can leave them in a lower bargaining position in terms of education and experience when applying for jobs and receiving wages. In Bolivia and Guatemala, indigenous groups have lower levels of schooling, lower earnings and lower rates of return to schooling.<sup>66</sup> In Peru, Spanish-speaking workers have higher returns to schooling than indigenous people, and non-indigenous workers earn more than twice as much as indigenous workers. Human capital investment is the key to improving the position of these indigenous people within the labour market.<sup>67</sup> In parts of Asia, too, human capital endowments reduce wage rates among ethnic minorities, whose rural remoteness distances them from schools, clinics and other services.<sup>68</sup>

#### Household constraints

Often female participation in the wage labour force is conditioned by domestic needs, such as child-care. Decisions about which family member to send out to work vary with the demographic cycle of the household and its physical and human resource base. Opportunity costs are important in decision-making. These are dependent on wages that can be earned, and the experience, efficiency and abilities of various household members. In rural India, the opportunity cost of one person's time affects that person's time allocation, and that of other household members, and thus uptake of labour market opportunities. Domestic labour is frequently viewed as women's primary role, and only when this has been taken into account will their participation in the external labour market

be considered. In Andean Peru, highest female participation in the wage labour force is among young single adult women who have low demands on their labour within the household.<sup>69</sup>

#### Cultural norms

Men and women often undertake distinct types of work, reflecting their culturally determined roles within the home, or access to education. In the Peruvian Andes, young girls are mostly recruited into domestic service. In Masvingo Province, Zimbabwe, women are involved in domestic work, while men are solely responsible for looking after cattle. In semi-arid tracts of India where households diversify risk in the absence of insurance and capital markets by sending family members to work, female labour is often not used for social reasons, even though it may make economic sense. In Pakistan, women's low participation in the labour force (less than 10% of the labour force in rural areas in the early 1990s) is as much due to social norms as to economic constraints such as poor education, few opportunities and low wages. In rural Kenya, while men take on paid work, women must stay within the household, producing for subsistence purposes only.<sup>70</sup>

#### Improving access to labour markets

As with other types of markets, resolving problems of labour market access will need a pluralistic approach. Certainly improving rural schools would improve employment prospects for the rural poor, although they may have to migrate to seek work unless sufficient local employment opportunities can be created. The changing nature of export agriculture, with an increasing emphasis on grades and standards, has led, in some parts of Latin America, to rising demand for better educated workers.<sup>71</sup> Labour mobility can be increased through improved road, transport and information infrastructure, reducing the transaction costs of seeking employment, allowing rural labourers

to migrate more easily to urban areas during slack seasons, so making their annual incomes and consumption more even.

Reducing remoteness allows the poor to respond to changes in labour demand wherever that may be: after farm price liberalization in parts of Africa (which allowed farm prices to rise), workers who had earlier migrated to urban areas returned to rural areas.<sup>72</sup> Some of the strategies aimed at reducing physical market access problems, such as building and maintaining roads, can significantly affect local employment opportunities through increased economic activity along roadsides and in transportation. Labour-intensive public works may help in some areas. In Africa, where liberalization has resulted in labour displacement due to inability to compete in the world market, rural remoteness from well-functioning labour markets can be overcome. Although in the past rural public works have been associated with short-term relief, these can be a long-term solution to rural problems: not only is surplus labour absorbed, but assets (such as roads) are produced for use in rural areas, which can promote rural growth.<sup>73</sup> But however successful employment generation schemes are in creating sustainable jobs, some groups, women and ethnic minorities will remain excluded because of discrimination and persistent social and cultural norms, although removing biases against educating girls and improving access to education by ethnic minorities may help.

#### LIBERALIZATION, MARKET ACCESS AND RURAL POVERTY

Advocates of trade liberalization argue that open economies fare better overall in the long run than do closed economies, and furthermore that open trade can play a positive role in poverty alleviation.<sup>74</sup> Faster growth accounts for about half of the international differences in rates of poverty reduction and is not systematically linked to worse income distribution. Freer trade, by accelerating

growth, should help the poor. If poor countries, being mostly well-endowed with labour relative to capital and other factors of production, increase their exports of labour-intensive goods, trade and growth will benefit poor people more.

Agricultural liberalization removes distortions that create biases both between the agricultural and industrial sectors and within agriculture (and industry). In general, liberalization has removed or reduced biases against farm prices, which had often been kept down in the past in order to keep consumer prices low; it has also helped the net food sellers among the rural poor, but harmed net food buyers.<sup>75</sup> If further liberalization of trade allows cheaper food imports from other countries, sometimes also poor, then the gains will be distributed in different ways: consumers will benefit while producers lose, at least until – if not constrained by lack of credit for example – they shift production to other food and/or non-food products where they do have a cost advantage.

Trade liberalization can affect the poor through their access to market distribution channels. In many developing countries, monopsonistic marketing boards are used to distribute products from farmers to local, national and international markets. Even when exchange-rate or tariff liberalization raises export-crop prices in the domestic currency, these boards, because they extract farm income as tax or because of corruption, inefficiency or market-related power, often fail to pass on increases in world prices for export goods further back in the supply chain. However, removal of these distribution channels often leaves farmers either dependent on a private monopsony buyer, who may be just as extractive, or isolated from markets, and, in some cases, from markets for sale of farm products as well as purchased inputs, and credit, since many of these boards had a multiple role.

In the short term, until competitive private sector markets develop, the rural agricultural popula-

tion, and especially the poor given the difficulties they face in non-contestable markets, may suffer smaller income gains or even losses from this type of trade liberalization, and the shocks may be transmitted to a number of markets (see Box 5.9). Trade liberalization has helped the rural poor when linked to measures to improve market performance and access; missing markets can mean that liberalization worsens poverty.<sup>76</sup> 'Getting prices right' by removing market distortions that affect incentives between agriculture and industry, and within agriculture, brings important efficiency gains. Attention must also be paid to ensuring that the constraints to the development of competitive and transparent markets are overcome.

Liberalization is predicted to reduce the bias against agricultural growth, productivity and prices. Table 5.1 shows farm efficiency effects of liberalization for five countries. In Chile, agricultural prices rose dramatically, with a large increase in output and productivity. Most other countries in this study felt smaller but positive impacts. However, the impact on poverty will depend on whether small farmers and farm-workers participate in the gains, to what extent the poor are net food buyers or sellers, and how they respond to

these changes. In Madagascar, small rice farmers comprise most of the country's poor, and most of them are net rice buyers: the rise in the price of rice meant these farmers faced higher consumer prices for rice, but they responded by increasing effort, leading to increased productivity and output, and so a reduction in how much rice needed to be purchased.

Trade liberalization eliminates policies that hold down low domestic food prices. It has led to an increase in both the mean and variance of all major food crop prices, particularly rice. While rising prices are likely to have a negative impact on the urban poor, who are on the whole net food purchasers, the effect on the rural poor will depend on the composition of their production and consumption and on whether higher consumer prices are passed on to producers. Rising food prices after liberalization had a negative impact on the rural poor in India, the Philippines and China.<sup>77</sup> If rising consumer prices are passed on to the producers and the country has a relatively egalitarian agrarian structure, as is the case in China, then liberalizing border trade as well as internal trade markets probably cuts rural poverty. However, if the economy is characterized by an

#### Box 5.9: Changing market access after trade liberalization

##### Better market access: cotton in Zimbabwe.

Prior to liberalization, the monopsony buyer (Cotton Marketing Board) held producer prices low to subsidize inputs into the textile industry. While large producers were able to diversify out of cotton into other, unregulated products, such as tobacco, small farmers could not do so and suffered from the low prices. After deregulation and privatization, three buyers have emerged, producing price competition and better prices for producers, and competing to offer extension and input services.

##### Worse market access: maize in Zambia.

In contrast to the Zimbabwean cotton success story, some rural poor in Zambia have had a bad experience in liberalizing maize markets. Prior to liberalization, pan-territorial and pan-seasonal pricing meant that remote farmers were subsidized by those living close to rail lines, small farmers were subsidized by those with storage facilities, and the whole sector was subsidized by mining. Non-remote maize sellers and consumers, who include deficit maize producers, have benefited from the reforms, but remote producers have lost: very high physical transaction costs arising from remoteness, compounded by a severe deterioration of transport infrastructure, make it difficult for traders to reach producers far from main roads.

Sources: Winters 2000; Oxfam/IDS 1999.

**Table 5.1: The impact of reforms on agricultural prices, output and productivity**  
(percentage changes during post-reform five-year period compared with pre-reform five-year period)

	Real agricultural prices	Real exchange rate <sup>a/</sup>	Real GDP growth <sup>b/</sup>	Agricultural output	Multi-factor agricultural productivity growth
Chile	+120	+105	+28	+40	+8.2
Mexico	-24	+22	-3.7	+14	+1.3 <sup>c/</sup>
Ghana	+5	+230	+3.9	+50	+12.2
Madagascar	+11	+94	+2.0	+15	+2.9
Indonesia	+20	+75	-0.6	+42	+2.3

a/ + Signifies that the currency depreciated in real terms relative to the dollar.

b/ The change in the annual growth rate of real GDP is measured in percentage points: for example an increase from 2.0 to 3.0% receives an entry of +1.0 not +50.

c/ Productivity growth was negative in the five years after reform but was even more negative in the five years before reform.

Source: Gardner 1995.

unequal agrarian structure (as in India and, much more, the Philippines) allowing consumer and producer food prices to rise to international levels is likely to benefit the non-poor.

Price fluctuations or price risk are bad for the poor, whether they arise internationally or domestically. Reducing a small or poor family farm's food or staple deficit reduces exposure to price fluctuations of purchased market staples, since less has to be purchased. On the other hand, increasing food surpluses increases exposure to market staples price fluctuations, since more has to be sold.<sup>78</sup>

Where rural infrastructure is good, the poor have been better able to respond to new incentives and opportunities. For instance, competitive markets developed rapidly in China after commerce was freed, thanks to good infrastructure in roads and irrigation and adequate production of fertilizer and other inputs. In contrast, in large parts of Africa, supply response to price and institutional liberalization has been slow, due to poor infrastructure and the slow development of commerce.<sup>79</sup>

However, within Africa distinctions must be made. Supply response to devaluation has been significant in Côte d'Ivoire, where road and communications networks are better developed. Cocoa harvests reached record levels in 1996 (at least 20% higher than the previous record), and non-

traditional exports also increased substantially. In contrast, in The Congo devaluation produced an extremely modest supply response, largely because of years of total neglect of the road network and other key rural investments. Distances are similar, but whereas in 1995 it cost 10-15 Central African francs (CEAF) per kilo to transport coffee from Ivorian production zones to the coast, in The Congo it cost CEAF 60 per kilo. These extra costs are passed on to the farmer in the form of lower purchase prices for their produce, and such costs also rise with devaluation, attenuating the farmer's gain from higher output prices.<sup>80</sup>

Trade liberalization has had a mixed impact on women. In sub-Saharan Africa women have often been unable to participate in the export crop market, lacking land rights, access to inputs and marketing channels. However, in Uganda, women own-account farmers are finding it easier to start growing non-traditional agricultural export crops than traditional export crops such as coffee. Women have gained through employment creation associated with trade liberalization in industry, services and agribusiness and food processing, although these are often seasonal and dependent on good yields. In southern Mexico trade openness improved the quality of life and earnings of women. Whereas two decades ago women were

heavily over-represented among poor farmers, they are now frequently working, often full-time, in urban businesses and factories or their own rural businesses.<sup>81</sup>

#### MARKET ACCESS AND GLOBALIZATION

Under globalization, market access becomes increasingly important as only those who have it can exploit the new opportunities. Without market access, the potential benefits of higher product prices and lower input prices are not transmitted to poor households. With closed markets, such households can be protected against lower product prices, higher input or consumption prices, and price fluctuations, though usually at high economic cost. Remoteness also restricts access to information about new technologies and changing prices, leaving the poor unable to respond to changes in incentives. Of course, supply response will also be affected by many other factors, such as access to assets, skills and credit.

The evidence suggests that there are benefits associated with globalization that can be realized by the rural poor, in a variety of different ways: as independent producers, as contracted producers or outgrowers, or as employees working in association with large commercial agricultural or agribusiness enterprises. In Guatemala, new export marketing channels for vegetables boosted the production of high-value labour-intensive crops. Small farmers (average 0.7 ha) realized large income gains from specialization, while employment in agriculture increased by 45%. In Central America, the value of fruit, vegetables and flower exports increased by 17.2% a year in 1985-92. Though they still represent a small fraction of total exports, expanding production has generated hundreds of thousands of jobs, especially for women drawn from poor rural households.

In Colombia flower exports employ about 80 000 people, 80% of them women. The trade boom has spurred growth in transport, packaging

and marketing. Similarly, global demand for year-long fresh fruit has brought new opportunities for women in Chile. They comprise over half the labour force in the Chilean fruit industry, primarily in packing, concentrated in peak season months between December and March. Women are popular for their dexterity and their willingness to accept unstable employment and rates of pay. The jobs open to them are very insecure, with long hours of work without a break during the season, and no source of income during the winter months. Conditions are also poor, with no proper health insurance, social insurance or pension rights. Yet at the peak of the season rural women can earn some of the highest incomes in the sector, and be the main wage earners for a period each year. Their integration into formal paid work has given them greater independence, social recognition and enhanced status within the household.<sup>82</sup>

In the 1990s national and overseas supermarkets have become increasingly important (Box 5.10). There are potential rewards: vegetables for supermarkets are increasingly not only picked and shipped, but locally washed, chopped, wrapped, combined into multi-product packs, labelled and barcoded, creating off-farm employment opportunities. But the process also contains dangers. The power of large buyers means that even the larger producers and exporters are left vulnerable: in the words of one large Zimbabwean exporter, removed from Sainsbury's (United Kingdom supermarket food chain) list, 'You can be replaced at the drop of a hat ... you are only as secure as your last day's delivery'.

As independent producers, smallholders find it particularly hard to meet supermarket requirements for quality (and consistency of quality), reliability of supply, and health, safety and ethical assurances.<sup>83</sup> However, they are occasionally contracted to service the export food market. In Zimbabwe, they are becoming increasingly involved in horticulture, producing for larger

commercial farms engaged in packing. Around 3 000 smallholders are growing for export on a contract basis, but face high quality requirements: much of their (sub-standard) produce is sold in the local fruit market.<sup>84</sup>

Smallholder farming offers important advantages. Indeed, researchers generally agree that smallholder farms use resources, labour, land and inputs more efficiently in land- or capital-scarce, labour-surplus economies than large-scale farms.<sup>85</sup> Nor is scale always the issue. In the Chilean fruit sector, while there are economies of scale in post-harvest activities that the small-scale producers cannot capture, the problem appears to be more one of the asymmetric distribution of power and the over-dependence of smallholders on export

companies. The large-scale export firms have established a contract system tailored to their needs; small growers have little choice but to accept the conditions. Elsewhere, marketing cooperatives have been able to provide small farmers with alternatives (like vegetable export cooperatives in Guatemala) but no such associations have yet developed in Chile.<sup>86</sup>

Including the smallholder is possible – many agricultural products, like bananas, rubber, cotton and sugar, have been produced and marketed through contracting many small-producers – but there are issues of quality and standards particularly important for horticulture. An increasing number of foods for both export and urban markets are now subject to grades and standards.<sup>87</sup>

#### Box 5.10: International supermarkets and local growers

The rise of large supermarket chains in the United Kingdom is an important example of global retail concentration. The top four supermarkets there account for almost 75% of food sales. Consumers have become accustomed to buying a wide range of affordable fresh fruit and vegetables all year round, sourced directly from southern-hemisphere growers, offering developing-country suppliers access to this lucrative market. However, although this trade can offer positive benefits, it remains buyer-driven, liable to change according to the supermarkets' customer needs.

Supermarkets now deal with a small number of larger producers, favouring longer-term relationships with suppliers. This helps suppliers improve standards and quality, but in return they are obliged to make greater investment and face greater risks. Kenya and Zimbabwe supply off-season speciality vegetables; South Africa is a major exporter of off-season fruit; Chile is now a world leader in supplying fruit to European Christmas markets.

Developing country producers and exporters can reap rewards, but are precariously placed in buyer-driven commodity chains. Supermarkets' demands have favoured the concentration of a few large firms in the export trade, sourcing mainly from large commercial farms, marginalizing small farmers to the diminishing wholesale market. But consumers benefit from increased product variety.

Two of Africa's largest exporters, Kenya and Zimbabwe, have shown that smallholder sourcing can meet the quality requirements of supermarkets. The exporter takes responsibility for organizing growers, arranging finance, providing technical support and ensuring traceability. In Latin America there is some evidence that smallholders can benefit if they organize into cooperatives, where they can gain better access to information and technical services and spread potential risks.

Employment in export agriculture can be an important source of income for poor rural households. Export crops generate more demand for labour per hectare than traditional agriculture, especially at key seasonal peaks and in post-harvest activities such as packing. Flexible labour requirements have favoured the employment of women in seasonal work in export agriculture, providing a pool of temporary skilled labour that can be mobilized each season. But working conditions are often poor and unregulated, with punishing production schedules and exposure to pesticides and chemicals putting women's health and safety at risk. The health and education of the family can also be adversely affected by women working long hours.

Source: Vogel 2000.



Farmers who do manage to meet quality and safety standards stand to gain from increased national and global trade. In Chile, small lettuce growers with access to clean irrigation water marketed their products as superior and earned significant premiums. However, meeting agri-food standards often requires substantial investments, in technology and monitoring, often out of reach of small farmers and processors. The costs to producers when they fail to meet grades and standards is high: between 1984 and 1994, the United States Food and Drug Administration detained more than 14 000 shipments from ten Latin American and Caribbean countries because the produce failed to meet United States pesticide standards.<sup>88</sup>

One of Africa's largest horticultural exporters found that while smaller producers can get involved with larger exporters so that transaction costs seem to be overcome, problems in ensuring quality were unresolvable (see Box 5.11). Persuading the supermarkets that smallholders can cope, and that smallholder sourcing will not endanger quality or safety, is possible, though rare. Supermarkets remain wary, appearing to feel that there is less risk in sourcing from a small number of large producers. Ironically, ethical trading standards increase this tendency: supermarkets do not want to be caught out, on child labour for example, and other labour standard issues, and so need to know who their producers are.

Smallholders have been more successful in integrating into global markets through niche markets, such as fair-trade products, environmentally friendly products and, to a limited extent, organic products (Box 5.12). Niche markets such as organics may represent a way to tap into premium markets and reduce reliance on agrochemicals. This 'agro-ecological approach' relies mainly on labour and organic material, as well as on being sustainable. However, significant improvements in information, knowledge and farm management would be needed. In addition the relatively low yields of such farming, and the land used up by some techniques (such as production of green manure), make this approach inappropriate in most land-scarce areas.<sup>89</sup>

## CONCLUSIONS

Contrary to the stereotyped image of their isolation from trade and markets, the rural poor are already closely involved in local, national and, to some extent, global markets. Rural households earn much of their income from non-farm activities and are active in non-farm labour markets and food markets. This view of the small farmer as a 'multi-sectoral firm'<sup>90</sup> contrasts with the predominant image of small farmers in low-income countries. Many farming households appear willing to accept the new opportunities of commercializa-

### Box 5.11: Two African exporters

*Homegrown*, Kenya's largest horticultural exporter, grows over 90% of its crops on its own farms using sophisticated irrigation systems and greenhouses, and has a fleet of refrigerated vehicles to transport produce from field to packing stations and on to the airport, where it has an ongoing agreement with MK Airlines to transport on every evening freight flight. It has also recently built a factory for preparing salads, guaranteeing that salads are picked, prepared, labelled and on supermarket shelves within 48 hours.

*Pumpkin* exports beans, snowpeas, papaya and mango from Kenya to a United Kingdom importer. Pumpkin initially sourced from smallholders, but realized it could not control product quality. The cost was calculated as 50% higher than the cost of produce grown on large farms because of the waste of produce that failed to meet European Union quality standards. It decided the market for second-grade produce was not large enough and in 1997 leased two farms in order to control its own production.

Source: Dolan *et al.* 1999.

**Box 5.12: Fair trade**

To address small producer poverty issues and in response to rising consumer demand for 'ethical' products, both alternative trade organizations (ATOs) and some mainstream firms engage in so-called 'fair trade'. Over 60% of the 2500 products bearing the fair trade mark are primary commodities such as coffee, tea, honey, cocoa, sugar, and bananas, and minimally processed foodstuffs. (The fair trade range does not include industrial and manufacturing goods but does include crafts – an important source of income for both rural and urban producers.) Producer stakeholders are therefore overwhelmingly rural. Global estimates of producers range from 1 to 5 million. Seven food product groups registered with the Fair Trade Labelling Organization (FLO) account for 235 cooperatives and 39 plantations in over 45 countries. One such cooperative alone, in Costa Rica, has distributed USD 1260000 to some 4000 affiliated small coffee producers.

In the United Kingdom, 70 fair trade products are sourced from over 100000 producers, not including family members and community externalities. Although much emphasis has been placed on the higher farm-gate prices producers earn as a result of fair trade pricing policies, producer groups tend to identify capacity-building in trade relations as a key fair trade benefit. The absence of adequate risk-sharing mechanisms and full information tends to marginalize many small-scale producers. Fair trade, with its long-term contractual commitments and technical/quality control services mitigates some of these marginalizing failures in international commodity trade as well as increasing the returns accruing to producers.

The fair trade retail market in the United States and Europe amounts to some USD 400 million each year. Although this accounts for only 0.1% of world trade, it represents explosive growth from the time of the first OXFAM shop in 1964. Improvements in product quality, combined with increasing consumer awareness and recognition of the fair trade mark and wider mainstream retail distribution, have facilitated some startling market penetrations. The introduction of a fair trade banana in Switzerland resulted in an immediate market share of 10% in 1997, growing to 20% of the Swiss banana market by the beginning of 2000. A more typical pattern of fair trade consumer market behaviour can be seen in the Netherlands, where the fair trade banana enjoyed an initial share of 10%, only to settle to a stable niche level of 5% of the market. The 2-5% market share range is characteristic also of the more popular fair trade products, including the market leader: coffee. With wide mainstream retail distribution in the United Kingdom, fair-traded coffee brands like Cafédirect and Ashby's Fairtrade have captured roughly 3% of both the ground and instant coffee markets. Similarly, fair trade ground coffee market shares in the rest of Europe average 2.6%. These somewhat low market shares coincide with high rates of growth for fair trade as a whole. In the United Kingdom, sales increased by 40% in 1998-99 alone and fair trade revenues to producers tripled from their 1996 level to £ 4.5 million in 1998. Finally, fair trade is reported to be growing at European rates of 10-25% per year.

These growth rates, however, are due mainly to the introduction of new goods in new markets since individual commodity patterns show an initial and rapid market penetration, typically followed by little expansion beyond the 1-5% market share level. The most recent fair trade product launches, namely bananas, as well as commercial penetrations such as the signing of Starbucks coffee to fair trade blends in the United States, suggest that this pattern, though typical, is not inevitable. It is therefore difficult to ascertain whether fair trade will remain a niche or is at the beginning of an important growth path.

*Source: Ronchi 2000.*

tion, in the hope that they will be released from poverty, but are constrained from doing so fully. The rural poor see that commercialization and globalization can bring increased employment opportunities and income-generating activities.

Small farmers and the rural poor often cannot take advantage of these opportunities. The transactions costs arising from poor physical access, the asymmetric structure of many markets, and their

lack of skills, information and organization can represent substantial barriers to accessing markets. Remoteness, scarce and poorly maintained roads, inadequate transport and storage facilities, and difficulties in accessing reliable information on products and prices prevent the rural poor from participating in competitive markets, often restricting them to non-contestable markets dominated by a few, powerful purchasers.

Reducing these transaction costs is a priority for improving access to markets. The difficulties lie in selecting policies that will have the greatest impact on reducing rural poverty while using scarce resources efficiently. Investing large sums in road-building schemes linking remote villages may be less appropriate than alternative infrastructure policies aimed at maintaining roads and improving transport and communications. A complementary approach would tackle not just the physical aspects of market access but the institutional transaction costs: encouraging competition by reducing information asymmetries, and removing farm price controls and other distortions that bias food and staples production.

If the rural poor are to escape poverty they need access to competitive markets not just for their produce but also for inputs, assets and technology, consumer goods, credit and labour. Many of the transaction costs that affect farm prices also affect availability and distort prices of other goods and services. Confronting the physical and institutional transaction costs through market reform and infrastructure development will raise productivity and incomes through greater farm output and more rural farm and non-farm employment. 'Getting prices right' needs to be tackled alongside infrastructure development.

However, the new opportunities presented by liberalization and globalization are accompanied by new risks, and the poor are often ill-equipped

to take these unless they have safety-nets. This is one more reason why some degree of food security is a precondition for the poor's enthusiasm for, and safe involvement in, crop-export-based globalization. Most smallholders with cash-crops, exports and/or supermarket links nevertheless keep some land in food for subsistence, diversifying into cash crops while maintaining food crop production.

Poverty can be reduced as the poor acquire access to wider market exchanges, but there are a number of provisos. First, mass poverty is normally reduced by the acquisition and technical improvement of land assets to enhance local staples production. There are exceptions to this general rule, as in the case of smallholder beverage crops. Second, the poor's progress through market development is strongly complementary with asset redistribution. Control by the poor over some human capital and, if in farming, some land, enormously helps in the willingness to take those risks required for successful involvement in expanded markets. Third, just as the case for liberalization embodies the truism that people are seldom helped by hampering their trade and exchange, so the case for globalization risks importing a fallacy: that the further away one trades or invests the better, that local linkages are second-best, that it is fine to subsidize trade and exchange, from free road access to internet-access subsidies.

## Endnotes

- 1 Narayan *et al.* 2000.
- 2 Wodon 1999.
- 3 Narayan *et al.* 2000.
- 4 IFAD 1999c: 20.
- 5 IFAD 1999a.
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- 9 IFAD 1999d: 62.
- 10 Glewwe and de Tray 1989.
- 11 Ferreira and Litchfield 1999.
- 12 IFPRI 1990, cited in IFAD 1999b: 41.
- 13 Channel 4 Television, London 1997.
- 14 These reviews of poor people's preferences are drawn from Platteau 1996: 197.
- 15 Howe 1984; Nepal: Blaikie *et al.* 1977; Bangladesh: Howe 1984; Egypt: El Hawary and El Reedy 1984; Pakistan: Ali Shah and Azam 1991.
- 16 Von Oppen *et al.* 1997.
- 17 Windle and Cramb 1997.
- 18 IFAD 1994a.
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- 25 Moslehuddin *et al.* 1993.
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- 27 World Bank 1994a.
- 28 ENXX. (IFAD [1999j]. Appraisal Report, PAMA Support Project. IFAD: Rome.)
- 29 Winters 1999.
- 30 Oxfam/IDS 1999.
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- 33 Abbott 1987.
- 34 Jaitly 1996.
- 35 Mrema 1994.
- 36 Oosterlee 1988.
- 37 IFAD 1999a: 87.
- 38 von Braun *et al.* 1999.
- 39 Binswanger and von Braun 1991.
- 40 Reardon 2000.
- 41 Turner *et al.* 1997.
- 42 von Braun *et al.* 1989b.
- 43 von Braun *et al.* 1989a.
- 44 Thrupp *et al.* 1995.
- 45 Von Braun and Kennedy 1994, cited in Killick *et al.* 2000.
- 46 Use of water, since it is cheap or free, for purposes such as drowning weeds, where returns are low; and lack of incentive to devise or adopt techniques, product mixes, or asset types that save water.
- 47 World Water Council 2000.
- 48 However, this challenges the growth of staples and could result in reversal of self-sufficiency in staples (reached in some countries, like India, during the Green Revolution) and increased pressure on foreign exchange resources. Furthermore, large staple-producing countries such as the United States and Australia will not be able to grow enough to feed the entire world in the future.
- 49 Water markets are particularly common where ground-water is extracted since this provides a more dependable and easily controllable and measurable supply than canal irrigation. Such markets perform best where medium farmers own wells, as they are more likely than large farmers to use water efficiently and to want to gain income through selling surplus.
- 50 IFPRI 1997.
- 51 Often confined to earlier acquirers of water-yielding assets, or poorer users of water. Water markets encourage construction of tubewells to produce water for sale. The extra extraction lowers the water-table and renders useless the cheaper dug wells, or shallow tubewells, owned or acquired previously by the poor.
- 52 Fujita and Hossain 1995.
- 53 Chambers and Farmer 1977.
- 54 Chambers *et al.* 1989.
- 55 Shah and Raju 1988.
- 56 Otsuka and Chuma 1992.
- 57 Thobani 1997.
- 58 For example, if governments artificially depress farm prices, for example by trade and exchange-rate policies favouring industrial products, the market price of water usable only for farm products is artificially forced down, leading to wasteful water use.
- 59 Kimmage 1991.
- 60 Adiseshiah 1994.
- 61 Colombia: Udall 1981; Ecuador: Rudel and Richards 1990; Pakistan: Ali Shah and Azam 1991.
- 62 Schultz 1988.
- 63 Bardhan and Rudra 1986.
- 64 Lipton 1983a.
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- 68 World Bank 2000a.
- 69 India: Skoufias 1993; Peru: Radcliffe 1990.
- 70 Peru: Radcliffe 1990; Zimbabwe: Adams 1991; India: Kanwar 1995; Pakistan: Sultana *et al.* 1994; Kenya: Neitzert 1994.
- 71 Barrientos 1996.
- 72 Horton and Mazumdar 1999.
- 73 Bryceson and Howe 1997.
- 74 Winters 2000.
- 75 Krueger *et al.* 1991.
- 76 Winters 2000.
- 77 Tendulkar and Jain 1997; Balisacan 1997; Khan and Riskin 1998. Liberalization affects poverty through employment as well as prices. Rising staples and food prices, while potentially bad for the poor if they are net food purchasers, may increase employment in food production, as long as price distortions between capital and labour are also removed which favour capital-intensive agricultural production.
- 78 Fafchamps 1992.
- 79 World Bank 2000a.
- 80 IMF 1998, cited in IFAD 1999b: 41.
- 81 Uganda: Fontana *et al.* 1998; Mexico: Gladwin and Thompson 1995.
- 82 Guatemala: Binswanger and von Braun 1991; Colombia: Thrupp *et al.* 1995; Chile: Barrientos 1996.
- 83 Dolan *et al.* 1999.
- 84 Oxfam/IDS 1999.
- 85 Deininger and Binswanger 1999.
- 86 Murray 1997.
- 87 Reardon 2000.
- 88 Thrupp *et al.* 1995.
- 89 Pinstrup-Andersen *et al.* 1999.
- 90 Reardon 2000.

