Markets working for the rural poor
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May 2009

Background paper for the IFAD Rural Poverty Report 2011

(*) The authors would like to thank Lucian Peppelenbos (from KIT) and Roberto Longo (from IFAD) for their very helpful comments during the process. Some of the cases in section 2 have been drafted by Mr. Peppelenbos, as it will be properly indicated. We are also grateful to the authors of the background paper that was written for this chapter (Taylor et al), and which introduction has been included here.

Some of the arguments contained in this chapter were researched and developed by Gonzalo Fanjul as part of an MPA program in the Kennedy School of Government (Harvard University).
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Introduction

Markets play a basic role in economic welfare. In rich countries life would be unimaginable without access to a wide array of reasonably well functioning markets, from food to credit and insurance. It is almost never the case that a rich-country household has to produce something in order to consume it, or that its members cannot sell their labor for a salary or wage. Credit markets function for small businesses and farms to finance investment projects, credit cards can be used to help households cover income shortfalls, and insurance markets help protect people from unexpected income and health shocks.

Access to markets is just as compelling for a poor rural household in Rwanda, India or Peru. Without good access to markets, a poor household cannot market its produce, obtain inputs, sell labor, obtain credit, learn about or adopt new technologies, insure against risks, or obtain consumption goods at low prices. Equally important, it cannot use its scarce resources like land and labor efficiently. Its decision making is constrained. Cut off from markets, it is forced into self-sufficiency, whether for food, labor, or other items. Its own subjective valuations, rather than market prices, then determine how its resources are used.

Consider, for example, a poor farmer who can produce high-quality berries at a low price. In town, exporters are willing to pay 20 cents a basket for berries like the ones he can grow; however, poor roads and information about buyers make marketing this perishable crop too expensive and risky. So the farmer produces a few baskets for his family’s own consumption, and he spends the rest of his time doing low-wage work, when available, on a nearby ranch. A basket of berries costs him 10 cents to produce. Implicitly, then, this is his decision price, or the price at which he is willing to produce berries. If he could become part of the export supply chain, his decision price would increase to the market price. He could be more efficient, shifting some of all of his time from low wage work to berry production, and he would have an incentive to invest in his farm. Most importantly, he could generate badly needed cash for his family.

When a household’s production and consumption decisions are based on subjective valuations instead of market prices, the household can reap gains, perhaps significant ones, by acquiring better access to markets. For example, without access to a labor market, a poor family’s time may be “trapped” in low-return activities on the farm instead of being sold for a wage in higher-return activities on another farm or at a business in a nearby town. When high transportation costs or marketing risk keep a farmer from selling a cash crop, her fallback is to produce a lower-value crop that can be eaten at home. When a farmer cannot obtain fertilizer or hire labor at the times needed, or when he lacks the cash to pay for these inputs, less land is sown, output falls and more productive technologies may not be adopted. Efficiency is critical, because even a small income gain can make a significant difference for an impoverished household.
Lack of market access can have catastrophic effects on rural households when disasters strike. Serious crop failures (more than 25% below-average harvests) occur in Southern Africa in about once every five years. When these happen, local food prices rise disproportionately (that is, above the import parity price), with seriously negative effects on rural households. On the other hand, when local markets are closely integrated with global markets, a poor harvest will have little if any effect on local food prices.

Without the ability to sell, irregular bumper harvests depress grain prices, undermining the incomes of small farmers who manage to produce a surplus. The result is cycles of low-price glut followed by scarcity. Markets are important for pro-poor development and poverty alleviation, for many reasons. The livelihoods of most of the world’s poor people depend directly on their involvement in markets, either as producers or workers. Historically, the major successes in poverty reduction have been associated with the growth of markets and the private economy. When asked about the major challenges confronting them, poor people frequently cite markets—either their lack of access to markets or the effects of markets on their livelihoods. Markets can play a valuable role in promoting and facilitating economic efficiency, by facilitating exchange and the coordination of many different kinds of resources, goods and services. They can help protect poor people from local food-production shocks. In these ways, markets are vital for income growth and survival.

Nevertheless, markets frequently fail to serve the interests of the poor. Understanding why is critical for designing rural poverty-eradication policies. The market challenges confronting the poor are probably greater now than ever before, because the context is changing rapidly. Governments are withdrawing from their traditional involvement in agricultural markets, increasingly obligated to do so by the international trade agreements into which they voluntarily enter. Globalization exposes agricultural producers to international price gyrations but brings potential benefits as well as threats.

At the same time, in most countries agricultural markets are being transformed by the new demands of exporters and supermarkets. There is wide evidence that poor rural producers have found themselves systematically precluded from these high-value market chains, left to fend for themselves in traditional markets in which prices, as well as quality and other demands, are lower. The changing market reality offers opportunities for those poised to take advantage of them as agricultural producers or, increasingly, as nonagricultural producers and wage earners.

The purpose of this chapter is not to provide an exhaustive and academic account of agricultural markets, but to show why the access of marginalized producers and workers to fair and remunerative markets is such a critical factor to overcome rural poverty. We will argue that the concerted action of active rural communities, effective governments and responsible
corporations can turn market risks into market opportunities. In doing so we have heavily relied on IFAD, KIT, Oxfam and other institutions, whose experience is reflected in numerous case studies quoted all through the chapter.

This chapter is structured as follows: After this introduction, the first section will briefly describe the four main problems that smallholders face in accessing national and international markets, namely (a) the uncertainty and volatility of these markets, (b) the burden of an unfair trade regime, (c) the changing nature of demand and value chains, and (d) the high level of transaction costs. Section 2 then turns into the specific strategies that farmers, governments and corporations could take in order to face these challenges and the causes that underlie them. In particular, we consider four main strategies: (1) Capacity development and collective action to empower small farmers, (2) enabling policy and institutional framework, (3) private sector involvement and partnerships and (4) provision of infrastructure and information systems. Finally, the chapter will offer some concluding remarks.
Section 1. Smallholders’ market access: Old and new barriers in transforming markets

A combination of natural and induced factors triggered two years ago the most rapid and steep escalation in prices we had seen in decades, followed by a sudden fall at the end of 2008. According to the trade theory, developing countries – where 90% of the farmers live - should have used this opportunity to increase their take in agricultural markets. They have an abundance of cheap labour and natural resources relative to other factors of production, and relative to the most developed economies. According to theory, the bubble in world agricultural prices should have provided poor smallholders with an unprecedented opportunity to increase their income and employment.

The reality, though, was very different. Put simply, poor producers lost out of high prices, as they had lost for decades out of low ones, and the spike posed an extra burden on poor rural families, whose relative spending on food is higher. Overall, developing countries’ food import bill is expected to rise by more than a third in 2008, deviating essential resources that would have otherwise paid for basic expenses such as health and education. According to the Asian Development Bank, progresses achieved in poverty reduction in this region during the past few decades could be reversed. Extreme poverty in Philippines, which had been reduced from more than 24 percent in 1991 to 13.5 percent in 2003, has started rising again pushed by the soaring rice prices.

The comparison with agroindustry in developed countries is striking. Farmers in rich countries have been able to pick up the low hanging fruit of a booming market. While the export capacity of industrialized economies remained almost untouched (-0.5%), they were able to increase cereal production by 11% between 2007 and 2008. Developing countries as a whole lost 8% of their exports and were only able to respond with a 1% increase in production (it even fall by 1.6% if you exclude Brazil, India and China).

Why is it so? What impedes smallholders in developing countries to increase their benefits in existing markets or access higher-value, more lucrative opportunities? The answer has to be found in a combination of old and new factors, which are described below:

- The uncertainty and volatility of international and national markets, which hit hardest the poorest and most vulnerable farm communities.
• An international trade regime based on double standards, which takes the opportunities of international markets away from poor countries and limits the policy space of their governments.

• The changing nature of demand and value chains, which is giving birth to more complex and concentrated agricultural markets.

• The lack of infrastructure, assets and information, which inflates farmers’ transaction costs and limits their opportunities in national and international markets.

To be sure, none of this can be decoupled from the broader problem of rural development. Issues like public spending to overcome supply-side constraints, the distribution of income, land and other assets or the access to basic social services constitute essential pre-conditions for a successful integration of farmers in markets. These issues are dealt with in detail in different chapters of this report, and we will therefore omit them here.

The uncertainty and volatility of markets

It is obvious that a sector that is based on the variability of natural conditions, such as rain, soil and sunshine, is a sector characterized by the variability of production and prices. Farming communities struggle to harness the uncertainty of agriculture through an array of instruments such as credits, insurances and less-than-profitable long term contracts with traders and suppliers. When these instruments are absent, uncertainty constitutes one of the major obstacles in their access to markets.

But the natural tendency of this sector should not hide the fact that the economic and institutional arrangements that define poor producers’ agricultural markets have done little to reduce this uncertainty. Most of the state-led mechanisms that guaranteed an inefficient though tangible cushion for producers were dismantled during the 80s and the 90s. International stabilization mechanisms such as the European STABEX or the IMF’s Compensatory Financing Facility have proved to be ineffective or largely underfinanced, and international commodity agreements have languished for decades in the middle of a general apathy.

Things have only got more complicated in the recent years. On the one hand, the increasing sophistication of financial instruments and market distortions, such as speculation, exchange rate fluctuations and export dumping (including certain forms of food aid). On the other, international markets are turning increasingly complex due to the interrelations of the different uses of agriculture (food, feed, fuel) and the trade offs that take place within them. The combination of
these factors, together with the historic low levels of food stocks, has been at the core of the recent food crisis.\footnote{9}

The result is the continuation of extreme short-term volatility of commodity prices, with variations up to 50\% of the crop price, in a sector that has witnessed in the last three decades as many price shocks in the range of commodities as the previous 75 years.\footnote{10} Just in the 2006-08 period prices were multiplied by 3.2 in the case of rice, 2.1 in the case of wheat and 2.5 in the case of corn.\footnote{11}

The consequences of volatility are felt at all levels of the market spectrum. Unexpected variations in export prices complicate budgeting and debt taking of national economies, which often implies higher borrowing costs. This was made apparent during the years of price depression: in 2000/2001, when poor coffee exporting countries sold around 20 per cent more product than in 1997/1998, but received 45 less income due to the fall in prices. For Uganda, this loss represented more than three times the total aid received in 2000 in form of debt relief as a Heavily Indebted Poor Country (HIPC).\footnote{12} But it was also true during the price boom, when the recent crisis in food prices had devastating effects for some of the poorest economies of the planet. According to the FAO, Low Income Food-Deficit Countries saw the cost of food imports increase by 35\%, which provoked an unprecedented spike in the number of undernourished.\footnote{13}

The effects of market uncertainty are magnified at the micro level, where rural households suffer the twofold burden of being poor producers and poor consumers. In fact, the increasing uncertainty of agricultural markets constitutes one of the major barriers for the sustainability of small farming. Smallholders are often confronted with highly fragmented and unequal markets, where their lack of organization makes it difficult to operate.\footnote{14} In the absence of economic alternatives or reliable sources of finance, small farmers tend to choose risk-reducing strategies such as shifting towards more stable and lower-value crops, reducing investment in inputs and technology innovation. Such strategies undermine competitiveness and efficiency, isolating farmers from markets and trapping them in subsistence production and poverty.

Box 1. The effects of price volatility on Cambodian smallholders\footnote{15}

Cambodia provides an illustrating example of these effects. For this open economy that produces surpluses of rice, soybeans and maize, among others, the rise in food prices (a bag of rice cost in 2008 twice as much as it did the year before\footnote{16}) would seem as promising news for the 85\% of Cambodians that live in the rural sector and rely on agriculture as their livelihood. It certainly was for those farmers who were able to produce a surplus for selling received net benefits from the higher prices. Dry-season rice producers found their gross margins up by 32\%, despite input costs rising by 50\%. Rather than reducing inputs such as fertiliser, whose price doubled or tripled, farmers purchased expensively on credit.

But the picture was quite different for a majority of households, most of them living on no more than one hectare of land. In spite of the price signals, these farmers lacked the irrigation, inputs, credit or market infrastructure needed to
increase production and yields. Most importantly, these are poor consumers that spend more than 70 percent of their
incomes on food and were therefore highly vulnerable. The prices spike forced them to choose between cutting back
their diet or assume debts at exorbitant interest rates. Almost two million people in Cambodia (12% of the
households) are food insecure after the food crisis. For the very poor, both urban and rural, obtaining sufficient food is
a daily struggle, and they live “from hand to mouth”, using their US $2–3 per day to buy rice and other essential food
within the same day.

There are reasons to believe that this volatility will be intensifed in the future, probably in the
context of higher average prices\(^\text{17}\). To the elements we have mentioned above, three important
factors have to be added:

- **Demography and urbanization**: Global demand of agricultural products has been driven by
  the dynamism of population and economic growth, particularly in large emerging economies
  such as China and India. This process is most likely to continue, even the context of the
global financial crisis. Greater elasticity of food demand in poorer countries translates any
variation in income and prices into levels of consumption with greater intensity.

- **Production of biomass**: Biofuels’ policies are likely to remain as a major factor of demand.
The International Energy Organization has calculated that biofuels-related grain demand will
increase by an annual rate of 7.8% in the coming years. If this is confirmed, “40% of global
grain production could be going to biofuels by 2030”\(^\text{18}\). In the absence of a dramatic boost in
overall global production, these figures could have a major impact on food prices and
availability.

- **Climate change**: According to the International Panel on Climate Change,\(^\text{19}\) even a moderate
increase of average temperatures would have a dramatic effect in the productivity of
vulnerable regions such as Sub-Saharan Africa. The combined effects of soil erosion, biodiversity loss and rainfall scarcity and variability could reduce developing countries’
rainfed agricultural output potential in the coming years.\(^\text{20}\) Extreme food insecurity episodes
could be longer and more frequent. As the world’s poorest and most rainfall-dependent
continent of the planet, Sub-Saharan Africa will suffer first and most the consequences of
global warming. Through its impact on food security, climate change could leave an
additional 600 million people facing acute malnutrition by the 2080s.\(^\text{21}\)

The response to these challenges will have to take place at the local, national, regional and global
levels, and will require a combination of old and new recipes that are covered in the second
section of this chapter.\(^\text{22}\) To the long-due investment in rural development, the reform of the
financial and trade system and the need to reinforce producers’ organization, new political and
institutional arrangements need to be added. The issue of food stocks constitutes an interesting
example of this approach: IFPRI has recently proposed a combination of three different levels of
food reserve (two physical, at the national and international level; and one virtual) that would
“avoid the collapse of confidence in the international grain market, with many countries now trying to achieve grain self-sufficiency and rebuild their own public reserves while ensuring that the world can respond to emergency needs for food and prevent extreme price spikes”.

An international trade regime based on double standards

Farmers in poor countries are increasingly familiarized with the complicated jargon of trade agreements. Concepts such as decoupled subsidies, applied tariffs or special and differential treatment are more often discussed in the assemblies of rural organizations in countries such as Mexico, Vietnam or Tanzania. Their communities have learnt the hard way how international trade rules condone the unfair practices of some players. Most importantly, they have seen the political capacity of their governments constrained, making it more difficult to design targeted policies that would protect smallholders against unfair competition and the volatility of agricultural markets.

To be sure, having the chance to implement pro-rural poor trade policies does not imply that developing countries will actually do it. Even in the absence of structural adjustment programs and other forms of external pressures, many governments have been unwilling to protect vulnerable sectors in the sake of broader objectives or simply vested interests of politically-empowered constituencies. There is therefore a twofold challenge for farming communities in this regard: governments should be allowed, first, but then they should be willing to act.

Let’s then focus on the first part. While agricultural exports account for the lesser part of the world’s total production, its relative importance for the economy of the poorest countries goes far beyond, since they constitute an irreplaceable source of foreign exchange. Most importantly, the rules established to regulate these exchanges have a critical impact on the remaining production, since they largely alter the leveled playing field of national markets and the capacity of governments to regulate their economies.

Under the proper conditions, agricultural trade has the potential to offer market and employment opportunities for smallholders in developing countries. In part, these conditions are related to the capacity of poor farmers to organize themselves, and the willingness of their governments to provide them with the proper economic and institutional support. But even when these conditions are matched, developing countries have to surmount the obstacle of an international trade regime designed to protect the interest of the most powerful players. Trade rules –contained in the WTO’s Agreement on Agriculture (AoA) and in a number of other bilateral and regional trade protocols- are an obstacle for development in three essential fronts:
• They limit the access of developing countries to rich countries’ markets: Agricultural tariffs are on average five times higher than the ones applied to other sectors. High average levels are determined by the introduction of so called ‘tariff peaks’ -which are intended to shield certain products and sectors- and ‘tariff escalation’ - tariffs that rise with the level of processing undergone. While the highest industrial tariff applied by the EU and the USA is 26% and 56%, respectively, these figures rocket to 231% and 350% in the case of agriculture.25

• They perpetuate export dumping practices and aggravate price volatility: According to the OECD, the producer support (PSE) in industrialized countries reached in 2004-06 an average level of $280bn per year, almost $40bn above the levels of 1984-86, when the WTO Uruguay Round liberalization negotiations started.26 During this period, explicit export support mechanisms (like export restitutions) have been substituted by an array of direct payments that artificially maintain European and American farmers in world markets. Not only this is a disguised form of dumping when exports take place, but it contributes to market uncertainty, since they change every year affecting investment and marketing decisions of third parties elsewhere.

• They restrict the policy space of poor economies: Developing countries have long been under pressures to open their markets and eliminate state-led support mechanism. The unilateral liberalization imposed by the IFIs during the 1980s and 1990s dismantled most of these measures, and left governments with a restricted capacity to intervene their economies in the interest of vulnerable producers. As a result, between 1990 and 2000, developing countries cut their average applied tariffs on agricultural imports from 30% to 18%.27 These practices have continued during the negotiation of regional and multilateral trade rules, leaving vulnerable producers to the mercy of cheap competition coming from subsidized exports in developed countries or low-cost exports from large developing exporters such as Thailand or Brazil.

The WTO Doha Development Round has so far done very little to resolve these problems. Developed countries have made a number of tariff concessions in order to ease the negotiating process,28 but these agreements have not increased poorest countries’ exports to the level it was expected. Only half of the more than 40 Least Developed Countries (LDCs) were able to increase their exports to the US under the preference programs in 2002. The total value of their preferential exports was $53 million, or less than 2% percent of total US imports under preferential programs.

In part, these failures are related to the supply-side constraints that prevail in many of the poorest countries of the world, such as limited market infrastructure. But even in those cases where
export capacities might have been met, previous protection has been replaced by a sophisticated net of non tariff measures that is threatening export efforts all across the developing world. Quantitative restrictions, such as import quotas, seasonal import restrictions, rules of origin and a wide range of product standards have been used by developed countries to restrict the entrance of products such as vegetables, fruits, meat and dairy. In the absence of the legal and technological apparatus to overcome these barriers, poor smallholders are often excluded from a market that is dominated by large producers and foreign investors.

In the meantime, developing countries remain under pressure to open up their markets. The derailed WTO negotiations have been replaced by an array of bilateral and regional trade agreements that impose reciprocity among unequal partners. The risks of these agreements for development were made apparent during the negotiations of the Central American Free Trade Agreement (CAFTA-DR), but it is the unbalanced nature of the Economic Partnership Agreements negotiated between the EU and the 76 ACP countries that is now concentrating most of the concerns (see box 2).

### Box 2. The development concerns of the EPAs

The negotiation of the Economic Partnership Agreements between the EU and the ACP countries illustrates the risks of a model that undermines the reform of the multilateral trading system and perpetuates some of its inequalities. In exchange for a profound, across the board liberalization that will cover close to 95% of European exports and highly development-sensitive sectors such as investments, services and intellectual property, the EU is offering ACP countries a less than imperfect market access proposal:

- With the sole exception of the textiles’ sector, the EU will not introduce reforms in its rules of origin for ACP countries, which will hamper industrial diversification and agreements with third parties. The arbitrary nature of these measures is illustrated by ‘nationality’ requirement of fish imports: Fish caught in Fijian waters, canned by a Fijian cannery and exported by a Fijian company would still not qualify as Fijian fish, and therefore gain duty-free access to the EU market, if the vessel or crew that caught the fish were not either Fijian or European.
- Tariff peaks and tariff escalation will continue penalizing ACP’s most valuable agricultural exports.
- No concessions will be made regarding the reduction of agricultural subsidies, since these reforms are considered to be part of the multilateral negotiating process.

Beyond any other consideration, the proliferation of North-South regional trade agreements is that they can undermine economic integration in developing regions. This is unfortunate, since the construction of regional markets in the developing world can play an important role in supporting economic diversification and reduce market fragmentation. It provides the private sector with larger markets, making it easier for them to specialize and increase the added value of their production. Already more than half of all exports from the East African Community (EAC) and the Southern African Development Community (SADC) to other countries in their regions are manufactured goods, compared with only 12 per cent of their exports to Europe.
The construction of a fairer international trade regime is critical in order to make agricultural markets work for the poor. Developing countries should see their right to promote development fully recognized in multilateral and regional trade agreements. For this to happen, meaningful measures have to be taken in order to eliminate the distortions created by agricultural protectionism in rich countries, and to guarantee the policy space of the developing world. The introduction of special safeguard mechanisms and the exception of certain products from liberalization would allow governments to implement the measures that we consider in section 2, such as targeted subsidies, price support mechanisms or the reconstitution of stocks.

**The changing nature of demand and value chains**

The long-lasting unfairness that prevails in the international trade regime is an exception of continuity in the midst of a revolutionary change. The increased access to technology has reduced the costs of transportation and information, allowing companies to take advantage of more open economic environments. National and international corporations play an increasingly pivotal role in linking producers and consumers through the processing and retailing of products. The rising importance of these new actors as *gatekeepers* of national and international markets suggests that far more importance has to be paid to the concentration of power in value chains and its implications for small farmers and rural workers across the developing world.

The transformation of value chains has come hand in hand with two interrelated processes: the rise of high-value agriculture (from fruits and vegetables to dairy and fish products) and the consolidation of large corporate value chains. Driven by the establishment of large retail structures and the increasing urbanization of developing economies, high-value agriculture is rapidly shaping global supply, with greater coordination and integration between actors. Together with energy crops, it constitutes a new window of opportunity for smallholders, which can be complementary to staple food and traditional export crops as a source of income.

Corporate agriculture plays a central role in this process. The private sector has experienced a major boost all along the value chain, most of it in the context of a steadily concentration process. Food manufacturers (such as Unilever, Nestle and Kraft) have retreated downstream to higher-value added activities associated with brand and product innovation, while food processors (such as Cargill and ADM) have emerged to fill in the spaces left behind in primary and secondary processing. According to a World Bank report, the four same companies controlled in 2004 60% of the agrochemical market, 33% of the seeds’ one and 38% of the biotechnological. The concentration process is horizontal (along the same sector) as it is vertical (along the same product), as large corporations move forward and backwards along the value chain integrating all the different stages of the product.
For smallholders and rural workers in the developing world, agribusinesses are at the same time a major risk and an unprecedented opportunity. Under the appropriate circumstances, private companies can be a powerful engine for rural poverty reduction. They can bring improvements in infrastructure, technology and support for commercialization networks, provide producers and workers with stable income and safety nets and facilitate the opening up of international markets and the exploration of new market niches. In India, the hiper-retailer Carrefour is developing sustainable models of procurement in vulnerable eco-regions and building capacity in areas such as food safety. SPAR in South Africa is supporting local community-based vegetable production. In Argentina, more than 300 representatives of the agribusiness sector signed in 2000 a voluntary code of conduct which has led to tangible improvements in corporate practices.37

But experience shows that the potential of this new supply chains is often spoiled. Millions more people each year are reliant upon increasingly tight value chains formed by large-scale agribusiness for food and work, whether for purchases or sales. The presence of these companies can exclude a majority and create insecurity in contracts and employment for those who are able to participate. The replication of the ‘quick, cheap and varied’ model of production that has predominated in other sectors such as garments can have devastating repercussions down the value chain.38

Nothing has illustrated better these dilemmas than the ‘supermarket revolution’ that has taken place in the last twenty years. Supermarkets now dominate food retailing in lucrative developed countries, and their presence is rapidly expanding in the emerging economies of the developing world. According to Thomas Reardon39, this process has developed in an astonishing speed: Supermarkets now enjoy a retail share of 50-60% in South America, East Asia (China excluded) and South Africa; and a 30-50% in Mexico, Central America and much of South East Asia. While in China, India and Vietnam their market is still low and variable (2-20%), it is experiencing an annual growth between 30% and 50%.

The expansion of large supermarkets has followed a dual model where retailing is highly concentrated but supplies are spread all over the world. In most developed and emerging economies a handful of super-retailers (such as Carrefour, Ahold, Tesco or Wal-Mart) dominate the market, but their suppliers can be atomized in three dozen countries and thousands of supply points, which are crucially channeled through specialized wholesalers and intermediaries.

For small farmers and rural workers in many developing countries, supermarkets are relevant for one essential reason: they can determine who is in the market and under what conditions. The implications for the distribution of power along the value chain are striking.40 In those cases where small producers have been able to integrate into the supplying chains, supermarkets have offered enhanced security and considerably higher margins than the traditional clients, such as
wholesales and groceries. Studies have shown, for instance, that returns per hectare of French beans in Kenya are 6 to 20 times higher than they are for maize-bean intercropping.\textsuperscript{41} Instruments, such as contract farming, have been revitalized for this purpose (see box 10 in section 2).

Unfortunately, the presence of supermarkets too often comes with a high cost for vulnerable smallholders, since many of them get excluded from domestic markets, as they were excluded from the international ones before. While many of these producers can bring the advantage of low labor costs and long growing seasons, meeting the standards of modern supply chains implies an important on-farm investment, including irrigation, cold-storage, transportation, packing technologies and traceability skills. On top of all this, buyers can add the extra burden of late payments, cosmetic standards and last minute orders.\textsuperscript{42} For a majority of poor family farmers -particularly in dispersed and deprived regions such as Africa- these costs are simply beyond consideration, and contracts very often fall in the hands of large international investors or even retailers settling their own production structures.

The benefits or loses that the changes in demand will bring to poor smallholders will depend on some of the same factors we have mentioned before. The combination of an active and organized producers’ movement, and the active engagement and regulation of the public sector will make companies consider new forms of market participation. A number of experiences have already been developed, as we will see in the next section of this chapter.

\textit{The lack of infrastructure, assets and information inflate transaction costs for poor producers}

We have described in previous pages of this section some of the new challenges that poor smallholders face in accessing agricultural markets, which include a more complex environment and the consolidation of new actors at the national and the international level. But these new problems come on top of the old ones. The progress of poor rural communities is ultimately determined by some of the same factors that burdened the previous generations: for farmers in Asia, Africa and Latin America the lack of infrastructure, productive assets or basic information can constitute insurmountable barriers and establish the difference between poverty and development.

Policies to eradicate rural poverty should be oriented to reduce the inequalities in the access to the assets that allow farmers and their organizations to take advantage of market opportunities. They need to be guaranteed with the physical and financial instruments that will make their
investments reasonable; the information that will allow them to make the proper decisions; and the infrastructure that will reduce their high transaction costs.

Input services were provided in the past by state-led policies, most of which disappeared in the last twenty years. Donor and government investment in agriculture plummeted, transforming the way markets were structured and serviced. Input services were provided in the past by state-led policies, most of which disappeared in the last twenty years. Donor and government investment in agriculture plummeted, transforming the way markets were structured and serviced.

Today, agricultural input and extension services are rapidly turning into a more dynamic market, where farmers get their resources externally. New forms of public-private partnerships have been introduced in Asia and Latin America as part of an ambitious agricultural development plan that included the provision of infrastructure and financial services (see boxes 8 and 10 in section 2). This has made the use of seeds and fertilizers more profitable and allowed for the creation of private dynamic input sectors, strengthening the links of farmers with markets. Not surprisingly, production support measures to increase supply and replenish stocks have been a key component in the response of developing countries to the food prices’ crisis.

High transaction costs constitute a second area of concern. According to one case study in Peru, the cost of basic infrastructure and transport represents up to 50% of the value of sales in certain areas of the country, punishing harder the poorest farmers. With some variations, this is very much the case of most developing countries. Uncompetitive costs are often related to the dispersion and remoteness of producers and the lousy quality of infrastructure; lack of roads (permanent or due to seasonal climate); high transport costs (due to the lack of infrastructure and its poor maintenance, the distance between producers and markets, and the high cost-benefit ratio of the products involved); or poor or non-existing communication infrastructure for disseminating relevant market information.

Infrastructure weaknesses are at the same time a cause and a consequence of extreme poverty. Higher incidence of rural poverty is often found in the most inaccessible areas, largely due to their difficulties to benefit from bigger markets (see table 1). In Africa, road density averages 63 km per 1,000 km², 40 times less than India in 1973. As the previous Rural Poverty Report of IFAD emphasizes, “high transport costs make parts of the rural economy ‘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.”

The problem is consistent all across the product sophistication range, from raw to high-value products. Andean semi-subsistence farmers often see their stocks of potatoes lost because of the seasonal rains that impede the access of transport to local markets. Cooperatives of small farmers producing flowers and other short-life products in Ethiopia could only deliver their supplies on
time and quality after an agreement with Ethiopian Airlines, which guaranteed airfare facilities and the expansion of this non traditional export commodity.\footnote{50}

<table>
<thead>
<tr>
<th>Table 1. Infrastructure in developing countries (selected indicators)</th>
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<tbody>
<tr>
<td><strong>Indicator</strong></td>
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<td>----------------</td>
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<tr>
<td>Kilometers of roads per square km of area, 1999</td>
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<tr>
<td>Percent of roads that are paved, 1999</td>
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<tr>
<td>Aircraft departures per million people per year (average 2000-2002)</td>
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<tr>
<td>Fixed line and mobile phone subscribers per 1000 people (2002)</td>
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<tr>
<td>Number land-locked</td>
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<tr>
<td>CIF-FOB factor for developing-country exports</td>
</tr>
</tbody>
</table>


Finally, communication infrastructure has proved critical in the access of farmers to market information on the evolution of prices and demand. Without information, the market signals do not reach producers, so they are unable to make the proper commercial decisions. This may result in exploitative conditions being imposed on producers, as they remain as price-takers that can only access the market through intermediaries or traders. While the introduction of mobile phone services and other technological devices has helped organizations to surmount part of this problem, the challenge remains for a majority of farmers.

Tanzania provides an illustrative example of the kind of problems described in this section. Mobile phone services already reach most of the country, and farmers use them to explore prices in different locations and wholesale markets. However, only a handful of producers can get their
products transported to markets outside their local area or the experience in business to bargain. In villages like Luale, located in a mountainous area with poor communication infrastructures, farmers carry their produce on their heads to the market, and once there they sell at whatever price they can get, as they do not want to carry the produce back again.\textsuperscript{51}
Section 2. Making markets work for development

The previous section has described a market paradigm in the midst of a revolutionary change. The old parameters that were used to navigate this debate in the past are hardly useful any more. The line should not be drawn between small and large farmers; or between national and international markets. And, as the recent food crisis has shown, it cannot be drawn between high and low prices either. In the agriculture of the 21st Century, where new forms of market structures are being shaped, the difference stands between those who are granted with market opportunities and safety nets, and those who are not. Rewriting this balance and the distribution of benefits that lie behind them involves a deep reassessment of the role that governments, companies and social organizations can play.

We will devote the following pages to develop this argument. Translating the potential of poor producers into reality requires more than a reform of trade and investment regulations. It requires answers on four fundamental fronts that are at the root of the challenges described in section 1:

- **The lack of power of poor farmers** in value chains, which squeezes their margins and perpetuates the structural inequalities of agricultural markets.

- **The failure of national institutions and international donors** in addressing the core needs of poor rural communities, expressed in insufficient funds and weak policy plans.

- **The inability of the different actors in the value chain to work together**, abandoning the old, zero-sum business model that puts the highest burden on the weakest links.

- **The unequal access to the services and infrastructure** that allow farmers to take advantage of market opportunities and reduce their transaction costs.

This section will address each of these problems proposing four strategies that are based on the experience of farming communities across Africa, Asia and Latin America:
While there is no ‘one-size-fits-all’ solution for rural poverty, these cases will show how small farmers work with companies and governments to find their place in local, national, regional and global markets. They consider old and innovative approaches, and they involve the necessary cooperation of different partners. Every intervention is unique on its own right, but its combination offers tools that would allow farmers and policy-makers to respond to context-specific challenges.

**a) Capacity development and collective action to empower small farmers**

We have seen in the previous section how a dispersed and powerless farming community lacks the market instruments and opportunities to make their way out of poverty. Whether we talk about farmers unable to influence their government’s budget priorities or even their position in trade negotiations, or whether we describe the difficult relations between a supermarket chain and the small farming communities, we are ultimately referring to the same problem: the lack of power of producers in their own markets. While new, innovative value-chain approaches have to be explored (as we will see later), experience shows that only active and capable farmers are prepared to face the challenges inherent to a system in permanent transformation.

Producer organizations are spreading their activities in rural communities across the developing world. It is estimated that 250 million producers belong to one,54 and the numbers are particularly striking in large agricultural economies such as India: between 1966 and 1998 the total number of cooperative societies increased from 346,000 to 488,000, involving 65 percent of
all rural households. In smaller rural economies, the phenomenon is no less impressive: between 1982 and 2002 the number of villages with at least one organization rose from 21% to 91% in Burkina Faso.\(^{55}\)

Their legal nature may take an array of forms: from informal organizations to associations, cooperatives, joint businesses, advocacy groups and small enterprises. While state-driven cooperatives have been the traditional form of market organization for decades, the liberalization process of the 1990s and the reshaping of global value chains gave birth to a new type of independent, market-driven organization that has acquired different roles and responsibilities.

Collective action enables small farmers to face the uncertainty and volatility of agricultural markets. Empowered and organized producers can participate in more remunerative value chains, escaping from the trap of safer but lower-valued productive systems. Through organization, it is possible for them to access infrastructure and services of storage, processing, transportation and insurance, marketing, extension, credit, insurance, input supply or provision of market information, which are essential to deal with these uncertain markets.

Under a global trade system that does not protect the interests of the less powerful players, empowerment and organizational capacity are determinant for small producers to acquire bargaining muscle for dealing with buyers and suppliers and political leverage for influencing national and international institutions. By entering new chains or upgrading their position in the existing ones, small farmers may obtain a better share of the returns under a globalized agri-food market.

In the context of transformation of modern agriculture markets, producer organizations – no matter what shape they take – provide effective support to small-scale producers. Organizing into lobby groups, focusing on entrepreneurial skills or building trustworthy relations with market partners improve their position in the market.\(^{56}\) The fast development of watermelon cooperatives in China has facilitated the access to high-value modern supply chains, through the provision of services and information (see box 10). Producer organizations can increase the efficiency and competitiveness of their members, creating economies of scale that provide marketing services, promote specialization and reduce transaction costs, facing one of the most relevant challenges described in section 1.\(^{57}\)

Other experiences of organization such as the rice producers in Haiti also illustrate the potential to improve the functioning of staple food markets and reduce food insecurity. In that country, a long period of low yields, along with imports of subsidized rice from the United States, displaced domestic production to cover only a 25 percent of national demand in 2005. In the main rice-grower region, a network of cooperatives articulated in order to commercialize processed rice in the local market and to facilitate access to better seeds, pesticides and fertilizers. In collaboration
with the Ministry of Agriculture, better quality seeds were developed and distributed, achieving 80 percent increase in yields and 25 percent drop of the breakage rate. That means more rice to feed the family and better quality rice to sell at a higher price.\(^5\)

The role of producer organizations has been also essential to develop agriculture and market policies supportive to smallholders. Some have engaged effectively in national processes for agriculture and rural development, ensuring that policies respond to the interests of small farmers. For example, the National Agriculture Laws in Senegal and Mali were highly influenced by national farmer organizations through a wide consultation process of formulation.

But this is not an easy task. Despite the remarkable potential of producers’ organization in harnessing new markets for their benefit, many organizations suffer a number of critical problems, such as lack of access to finance and support services, weak recognition and independence from governments and scarce leverage in markets and policies.\(^5\)

In part, these challenges are related with their internal weaknesses, including lack of leadership and managerial capacity, weak governance and accountability failures. Participation is not always well balanced in terms of gender. Women frequently find it more difficult to join and become active members of farmer organizations, especially when land ownership is a criterion for membership. Although many organizations have been forced by donors and development agencies to include more women as members, empowering them is a different thing. Women may be part of directive boards, but they rarely participate actively.

The notion of inclusiveness in rural producer organizations and the extent to which they can be used to reach the rural poor in sub-Saharan Africa have been examined taking Ethiopian farmer cooperatives as a case point.\(^6\) A study based on a combination of household- and cooperative-level survey data found that poorer farmers tend to not participate in these organizations although they may indirectly benefit from them. And when they do participate, they are often excluded from decision-making processes.

The case of Faso Jigi, in Mali, illustrates how institutional innovation may reduce transaction costs and strengthen competitiveness, securing fair and stable prices to their members, expanding traditional markets for the benefit of the rural poor (see box 3).
Box 3. *Faso Jigi and the cereal market in Mali*

The process of structural adjustment that took place in Africa since the 90s leaded to a reduction of the state intervention in agriculture, practically eliminating its support to production and changing the rules of cereal trade. As a result, the role of the private sector and associations became more active, stimulating cereal production. But some factors influenced negatively the efficiency of cereal markets, such as the absence of financial services, the price volatility, and the bad quality of cereal produced. A highly scattered production and a very weak level of organization limited the bargaining power of small scale producers face to buyers. Many intermediaries in the chain took profit, enlarging the differences between farmer gate and retail prices.

In this context, Faso Jigi was established in 1995 as a pilot project by the consortium between UPA Development International and Development International Desjardins (DID), with the support of the Canadian International Development Agency (CIDA), in the framework of a program for restructuring cereal markets. Created as an association of farmer cooperatives, it was aimed to facilitate the access to markets and to obtain better and more stable prices for rice, sorghum and millet.

The collective marketing brought together important volumes of product, gaining bargaining power and reducing transaction costs thanks to economies of scale in storage and transporting. A collective trading system guaranteed stable farm prices, and a wide dissemination of market information on prices avoided abuses from buyers. The provision of technical advice improved yields in quantity and quality. And the common purchase of fertilizers ensured better prices and quality.

As a response to the insufficient financial capacity of small farmers to face the necessary investments at the beginning of the campaign, a mechanism of anticipated payments was developed by Faso Jigi. According to the commitments of production that will be delivered to the organization, the producer receives an advanced payment. These commitments serve do define the need of credit, which is demanded by Faso Jigi to a financial entity, using its marketing fund as guarantee. Along with it, a security fund has been established to cover eventual damages and price shocks.

After more than ten years, Faso Jigi has become an outstanding organization involved in collective marketing in Africa. It brings together more than 7,000 farmers, grouped in more than 160 cooperatives, including 16 fully integrated by women. It annually sells around 8,000 tons of cereals - 20 per cent of the national security stocks – valued in more than 2.5 million euros. It is the most important farmer organization in West Africa, with a significant capacity to influence both markets and agriculture policies.

Economic analyses demonstrate the positive impact of Faso Jigi, not only on their members’ incomes but also on the regional economy. Despite the production costs for a member of the group are higher than for a non-member, this is fully compensated by higher yields and better prices.

Wholesalers prefer sourcing from Faso Jigi, and are willing to pay higher prices, because it offers centralization of stocks, better quality in storage facilities, and accessibility. Cereal sourced from Faso Jigi has a well known quality, and it even incorporates traceability systems. But cereal markets are in permanent change. Faso Jigi must adapt its collective marketing system to remain being competitive. And in order to assure net revenues of their members, the organization must take decisions and measures aimed at maintaining the confidence of producers, and safeguard their interests.

Some factors of risk that might destabilize markets are: the potential competence from imported cereals, food aid programs and informal markets. On the other hand, clue factors for success have been the members’ commitment and participation, the cooperative transparency, and a proved planning capacity. The credibility of Faso Jigi face to the bank system has been essential to maintain the mechanism of advanced payments, and it would not have been possible without the responsible attitude of farmers delivering the production planned.

The main lesson learned is that a collective marketing system may be an effective way of securing fair and stable prices to producers. When functioning efficiently, it empowers them to influence not only markets but also agricultural policies.
b) Enabling policy and institutional framework

Governments and institutions set the rules of the game that determine who has access to markets and how assets and opportunities are distributed within them. Unfortunately, as we have seen in section 1 many of the things we take for granted in a functioning economy are not necessarily present in poor countries’ agricultural markets. The producers and traders of a simple bushel of beans demand rules and institutions that will guarantee its property and labor rights; that will provide an affidavit of its product’s quality and standards; that will protect them against the abuses of intermediaries and the vagaries of international prices; that will build the infrastructure to trade their products; or that will promote the macroeconomic stability to make their profits worth it. Ideally, the state will also provide smallholders with access to the assets, inputs and services essential to produce, whether these come from public agencies or the facilitation of an extended and functioning private market.

The role of the public sector in agricultural markets has suffered a profound transformation. In many developing countries (particularly in Africa and Latin America) the liberalization process that took place during the late 1980s and the 1990s dismantled a number of the public institutions that had traditionally sustained the agricultural sector in regions like Sub-Saharan Africa and Central America. While in a few cases governments reinvented public intervention in a successful way (see box 6 on Malawi), most of the time inefficient public policies were replaced by a policy and institutional vacuum that was only partially filled by private companies and burdened poor smallholders with higher risks and transaction costs.62

Where smart governments have been able to reform inefficient public institutions, create an enabling environment for private investment and underpin secure links between farmers and markets, rural poverty and food security objectives have been achieved. This was the case in Vietnam, a country that evolved from rice dependence in 1989 to becoming the second largest exporter of rice in 2004 and dramatically reduced poverty rates (see box 4).

**Box 4. Pro-poor agricultural policy in Vietnam**

The transformation in Vietnam agriculture started in 1986 with the transition from a centrally planned economy to a market-oriented system, involving a much greater role for the private sector, greater openness to international trade and to foreign investment.

Two outstanding features marked the agriculture policy in recent years and were responsible for a rapid growth in production: the de-collectivization of agricultural production and the changing position on rice exports. Producers’ rights over their plots were strengthened, domestic and foreign trade on agriculture inputs was increasingly liberalized and many subsidies were reduced or removed.

Nevertheless, price stability remained a priority for the government, establishing a floor price for producers and a ceiling price for consumers. Domestic and external trade were heavily regulated. Fearing that liberalization would
result in more volatile prices, negatively affecting consumers, export restrictions were maintained, although they were gradually reduced. In 2001, the system of quotas was finally abolished.

These policy reforms had a major impact on the performance of the agriculture sector. One of the most important effects was the increase in rice prices. On the contrary, fertilizer prices fall due to the liberalization of imports, which led to a three-fold increase in the volume of imports and a sharp increase in domestic availability. These changes in the price of inputs and outputs increased production incentives and helped to stimulate rapid growth in agricultural output, particularly in the case of rice. Outputs and yields grew rapidly, and the increased production combined with the reduction in export restrictions resulted in a sharp rise in the volume of exports.

What is more important, the potential effect of agriculture policies in the poor was among the major concerns of policy-makers in Vietnam. In the short term, consumers were negatively affected by higher prices. But producers benefited from them. Considering that rice farmers represent a large proportion of the country’s poor, the overall effect on poverty of market liberalization in the rice sector has been positive. At a national level, the proportion of people under the poverty line fell from 58 per cent in 1993 to 37 per cent in 1998 and 28 per cent in 2002.

Two important factors maximized the contribution of rice sector liberalization to economic growth and poverty reduction. One relates to equality in land distribution and the other to government investment in infrastructure and technology. In Vietnam only 2 per cent of the rural population is landless. On the other hand, the level of education and literacy amongst Vietnamese farmers (compared with other poor countries), combined with heavy government investment in irrigation and agricultural extension services prior to market liberalization, allowed farmers to adopt successfully modern technologies, such as high-yielding seed varieties, fertilizers and crop protection methods.

The case of Vietnam shows that there is scope for an ambitious and intelligent intervention of governments in order to balance the access of poor producers to markets. In the past, comprehensive government intervention included both the regulation and management of production activities. Today, most of the public agencies that were involved in productive and trading activities have disappeared, but the rational for an active public role in markets remains. In the context of highly distorted markets that we have described in section 1, targeted measures can be used to protect vulnerable producers and consumers against risks and unfair competition.

The Guatemalan rice sector illustrates this case. The Central America Free Trade Agreement (CAFTA) included a requirement for processing companies: for each percentage point of quota used, companies are obliged to buy the same percentage of domestic production at a guaranteed price to the producer. This has contributed to regulate the domestic rice market. There are no price fluctuations for rice: guaranteed prices are set for a year, providing a reference price to which marketing margins are added. Increases in world prices have had a positive impact on producers here, who now earn nearly double what they did before.

In other context, food transfer programs have proved to be effective in supporting food production and reducing food insecurity in vulnerable households. In the case of Brazil, the government sources directly from smallholders and distributes food into national reserves, vulnerable families, hospitals, schools and prisons (see box 5). This system secures a stable demand at guaranteed prices, what represents a major incentive to producers.
The Brazilian agriculture policies have been very supportive to small farmers. Among other interventions, the State provides subsidized credits, insurance services, technical assistance, and public procurement at prices guaranteed. Since its creation in 1995 to 2007, a national credit program distributed loans through 12 million contracts, for a total amount of around 18 billion dollars, to overcome the lack of financial capacity to invest on the farm. This program is present in almost all the villages of the country, and for many of the beneficiaries it represents the first time that they obtain credit.

Since 2003 a variety of instruments for insurance have been created, in order to protect farmers from the risks inherent to farming. These safer conditions have stimulated the production and incomes. However, many producer organizations demand a wider coverage, given that only 20 percent of producers are estimated to have access to different modalities of insurance.

To provide technical assistance, the Ministry of Rural Development works in partnership with governmental and non-governmental organizations to bring extension services to more than 4,000 localities. Contrarily to the tendency of neighboring countries to dismantle the public structures of support to agriculture, Brazil has multiplied the capacities and resources assigned to its program of technical assistance.

In 2003, a program for food procurement was launched with a double objective: to provide food to food insecure families and to support production on small farms. The government sources directly from smallholders at prices guaranteed, with the condition that they are not higher than those in regional markets. The food is distributed into national food reserves, families in extreme poverty, and provision to schools, hospitals and prisons. The national program for scholars feeding is one of the biggest in the world. In 2007, it provided free meals to 36 million children, and at least 30 percent of the food must be sourced from small farmers. This strategy links vulnerable consumers to small producers, benefiting the latter from the expanding demand that is also generated by the cash transfer program. During the last years, around 100,000 small farmers have participated as producers, and almost 10 million people were beneficiaries of the program.

An important effect in the redistribution of incomes has been achieved by the extension of the social security since 1988. It is estimated that 26 million people living in rural areas (from a total of 32 million) have benefited from this coverage, in areas traditionally excluded from economic development.

Other public policies have also contributed to reduce the marginalization of rural population: the extension of the social security to rural areas benefited 26 million people; the provision of electricity access to more than 10 million people; and the policy for raising the minimum salary for agriculture waged workers.

Moreover, the support to small scale farming and the social programs specifically oriented towards food security and poverty reduction in rural areas have contributed to soften the impacts of the food crisis in 2008 and generate resilience to future crises. Brazil showed that a country that invests in agriculture and social programs is in better condition to face food price shocks.

However, the response from the supply side always depends on the availability of the necessary assets and resources to produce. Many often, the lack of access to inputs is a main constraint for increasing productivity. In the absence of efficient input markets, governments may facilitate access to fertilizers and seeds, as it was the case in Malawi (see box 6). These input subsidy
programs, however, have been accused of not addressing the fundamental problem of high input prices. Some argue that the right policy response would be to make input markets work better – reducing transportation, handling and port clearance costs – rather than award costly input subsidies. Kenya is an example of success in improving the access to fertilizers by stimulating private investment in importation and retailing.65

Box 6. Input subsidy programs in Malawi66

For more than half of the Malawian smallholders whose livelihoods are based on low input maize production, fertilizers are simply unaffordable. It is very difficult to find bags smaller than 50 Kg, whose price represents around 10 percent of the average per capita annual rural expenditure (data for 2003-04). So they remain trapped in a poverty circle, depending upon casual laboring and other income earning opportunities for buying the food they can not produce at prices they often can not pay.

After almost a decade of experience with small-scale subsidy programs, in 2005 the Government of Malawi started the Input Subsidy Program (ISP) with the objectives of improving smallholder productivity and reducing vulnerability to food insecurity. This system is based in coupons that entitle to purchase fertilizers at a subsidized price (close to 80%) and to obtain seeds for minimal prices or even free. Private firms are involved in procuring, but the distribution is entrusted to public fertilizer distribution agencies.

As a result, maize output rose from a mean production of 1.5 million tons (2001-05) to 3.4 million tons (2006-07). Food security in rural households improved significantly, although the high maize prices in 2008, largely attributed to private traders’ speculation, affected negatively many families. Another important positive effect was the stimulus to private sector for supplying inputs to the under-served areas.

The Program reached 1.75 million farmers in 2006/07, at a budgetary cost of 73.2 million dollars. It was not formulated as a safety net, but rather as a boost to agricultural productivity. To be a beneficiary it is necessary (in theory) to own land and to prove labor and financial capacity to purchase inputs at the subsidized price. But in practice, there is a lack of formal clarity in the criteria of eligibility, and in some villages all households were registered to receive coupons.

These kind of programs are often questioned for implying a high budgetary burden. But ISP has a benefit-cost ratio between 0.76 and 1.36. Its impact is vulnerable to factors outside government control, such as the rising prices of fertilizer or the volatility in maize price. Improving effectiveness and targeting in the poorest households; optimizing program scale; allowing the private sector to supply a larger share of the market and better coordination with social protection policies and programs are some of the measures to ensure sustainability and high rates of return in the future.

While rigid public production and trading apparatus may not be justified today, the role of the public sector in the regulation of competition and services provision is getting more importance every day that passes. As producers get involved in national and international higher value chains, their protection against market abuses is becoming critical in order to make markets work for development. In Ethiopia, where rural wholesale traders are essential to the grain distribution system as they purchase from farmers and perform interregional trade, it is proved that traders in
a typical source market engage in imperfectly competitive behavior in purchasing from farmers, driving down the price paid to farmers approximately 3 per cent. Some countries have already engaged in the regulation of predatory retail prices, such late payments and unjustified standards. Argentina, for instance, has established an obligation for supermarkets to pay no later than 30 days.

A final area where government intervention makes a difference is related with the protection of producers against climate shocks and market risks, in particular price volatility. At the micro level, old price support mechanisms have been replaced by market-based price risk management tools, such as forward contracts, futures and options. Poor smallholders, though, very rarely access these products, and have in turn to rely on government support when it is available.

For that reason, in Brazil the government maintains a variety of instruments for insurance that help farmers to face the risks inherent to agriculture. Warehouse receipt systems may also act in practice as risk management tools against price instability, sharing the risk collectively. In the case of Tanzania, a program launched by the government established savings and credit cooperatives, and a warehouse receipt system, which enables farmers to store their harvest when prices are low and sell at the right time, allowing them to borrow cash using their production as collateral. This system reduces their vulnerability to price volatility (see Box 7)

**Box 7. Tanzanian smallholders build market links and gain bargaining power with government support**

Nearly four and a half million Tanzanian smallholders, traders and processors fell into poverty in the absence of enabling policies, adequate market infrastructures and information, and available investment capital. To assist poor districts with high yields but serious market problems, the Tanzanian government launched in 2003 the Agricultural Marketing Systems Development Programme (AMSDP). Rationalizing policies, improving the agricultural marketing and pricing systems and empowering smallholders were their main goals. After five years, there was a new agriculture marketing policy, roads constructed and rehabilitated, market places created and small farmers provided with training and financial services.

The AMSDP established other initiatives such as the savings and credit cooperatives or the warehouse receipt system, which enables farmers to store their harvest when prices are low and sell at the right time, allowing them to borrow cash using their production as collateral. This system, along with the First Mile Project described above, allows them to gain bargaining power and higher profits and reduces their vulnerability to price volatility. In Babati district, for example, farmers doubled and even tripled their earnings thanks to these services.

Almost half of the beneficiaries of the AMSDP are women. They have enhanced their access to market through brokered deals. As a result of affirmative actions, women lead about 20 per cent of the 647 groups. However, AMSDP faces some challenges at introducing gender changes in communities, and they keep on being fairly represented in the management structures.
<table>
<thead>
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<th>Box 8. Dairy policy in Kenya</th>
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<td>After decades of state control, the Kenyan dairy sector was liberalized in the early 1990s. The idea was to end the monopoly of the Kenya Cooperative Creameries in milk marketing in urban areas, and allow the private sector to step in. However, the inherited legal framework, designed for a state-controlled marketing system, was not adapted to the new reality of a private-sector-driven dairy sector. The law prohibited trade in non-processed (non-pasteurized) milk products, because of concerns about the health risks of raw milk. But 86% of milk was sold unprocessed by informal traders, while only 14% was pasteurized and marketed through the dairy processors. The market demanded non-pasteurized milk, because it has more butterfat, tastes better, and is cheaper.</td>
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<td>Small-scale milk traders cater effectively to this demand for cheap, raw milk, and they took the place of the monopoly. This small-scale informal trade system includes traveling traders, milk bars, small processors, and small retail shops or kiosks. The milk is collected up directly from the farmers, on average from 30–60 km away. It is brought to the cities by traveling traders, by bicycle, public transport or on foot, and then distributed among milk bars, processors, kiosks and retailers. The majority of traders sell only 50–120 liters a day. But the ban on raw milk severely hinders the traders’ business and drives them into the informal sector.</td>
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<td>Research by the International Livestock Research Institute (ILRI) found that the dairy sector supports 365,000 jobs in Kenya, approximately 12% of the national agricultural work force. They lobbied the authorities and approached the media, defending the maintenance of the small mobile milk traders. And the diverse stakeholder for the first time got together so develop mutual understanding, overcome old prejudices, and find solutions to the benefit of farmers, traders and consumers.</td>
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<td>The law is not yet changed, but the authorities’ attitudes have. They now acknowledge the usefulness and legitimacy of small milk traders. The traders are no longer chased from the street, but are gently persuaded to participate in training and obtain the necessary documentation and licenses. Instead of merely arresting offenders, officials now advise them and set a deadline for them to meet the requirements.</td>
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<td>The Kenya Dairy Board has evolved from a policing agency to an open regulatory and advisory body. Before 1999, the Board was reluctant to recognize the small-scale traders, so they operated illegally. Although the requirements have not changed, the traders now find it easier to obtain licenses. The milk traders have also put in place some quality-control measures. A few have received training on milk hygiene and willingly share their knowledge with other traders. Those who get milk directly from farmers advise on clean milk production. In addition, they use lactometers to test the milk for adulteration. Through the intervention from ILRI the dairy sector has become more sustainable. The legal framework is now more in tune with the reality of the dairy market. The real needs of the chain actors and consumers are now better understood by the authorities.</td>
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<tr>
<td>The success of the Kenya dairy case shows the merits of sector-wide multi-stakeholder consultation around evidence-based insights developed through factual research. This helps to overcome the prejudices and misconceptions that commonly distort the communication and cooperation between actors from different backgrounds.</td>
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<tr>
<td>The same approach has been pioneered by ILRI in other countries in the region. In particular, a regional programme has been working with dairy regulators from Kenya, Uganda, Tanzania and Rwanda to promote uptake of new institutional approaches and appropriate technologies to transform informal milk markets in the region. In 2006 the regulators agreed basic requirements to rationalize and harmonize regional policy and standards, and to pilot new approaches incorporating business development services. The agreements emphasize the use of common training materials and approaches for capacity building of informal milk traders before their certification, which is to be recognised across borders in the region.</td>
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</table>
c) Private sector involvement and partnerships

Empowered farmers supported by enabling governments would never achieve market inclusion in the absence of a receptive private sector, composed by wholesalers, processors and retailers. The role of a company is to make profits, not to develop smallholder capacities to enter the value chain. But there are examples of win-win situations, where a corporation chooses to source from small farmers, sharing information and expertise, testing products and providing feedback. This way, instead of just having a passive role, buying products when available at the right quality, quantity and price, the company becomes a “partner in development”.

The cases that illustrate a new generation of corporate-farmer relationship tackles in a very direct way some of the problems described in section 1, like the asymmetric relations in value chains, the difficulties to open new markets or the high transaction costs that small farmers must face. In the case of the Peruvian native potatoes, the willingness of the private sector has led to the inclusion of traditional varieties into the agro-industrial value chain and the national cuisine, gaining value and generating remunerative prices for smallholders (see box 9).

Box 9. Private sector gives a boost to Peruvian native potatoes

The subsistence of many poor communities in Peru is based on cultivating potatoes. But uncertain prices, post-harvest losses and the tendency to substitute them by rice and wheat have discouraged most farmers. They have gradually replaced traditional varieties by white potatoes, less nutritive and subject to more instable prices.

Income raising and food security were the main objectives of a program to recover native potatoes and include them into the agro-industrial value chain. Frito Lays, the main processing company, used to source from big farmers and store high quantities of potatoes. The program offered the opportunity to reduce storage costs, and in 2005 half the potatoes for this company were supplied by small farmers.

To achieve that, it was necessary to meet high safety and quality standards by applying adequate post-harvesting, storing and transporting practices. Technical innovation allowed for developing higher yielding seeds and recovering traditional varieties. Along with better practices, productivity increased from 6 to 14 tons per hectare.

By organizing in groups, farmers generated economies of scale, reduced transaction costs, improved competitiveness and strengthened their bargaining power. They obtained more stable and remunerative prices after signing contracts with several corporations, which compensated processing costs and high transaction costs due to market isolation.

Nowadays, native potatoes are marketed in supermarkets as a differentiated and quality product, under the brand Tika Papa. National chefs have incorporated them into the modern Peruvian cuisine. The Government promotes its consumption, which has risen in the last two years. A certification on social responsibility is being pursued to differentiate the product. And several new manufactured products have emerged based on native potatoes. The good acceptance of these products has motivated the company to sign bigger contracts with farmers.
Another case of value chain intervention with a positive impact is found in the dairy sector in India. To supply a growing demand for high-quality dairy products, Reliance Dairy Foods started a pilot dairy operation in order to build its own chain. This chain consists of village pooling points, bulk milk pooling centers and dairies where milk is pasteurized and packaged. For ensuring that the farmer end of the chain functions well, the company signed an agreement with a subsidiary bank, in order to provide finance services to 40 villages. Now, more than 2,000 farmers have increased their sales and obtain better and more stable prices.

As explained in section 1, the so called supermarket revolution has influenced changes in local production, increasing requirements in terms of volume, quality, and logistics. Small-scale producers are pushed to deliver bigger volumes of produce with specific quality standards to a “specialized supplier” who bulks the produce, controls the quality and then sells to the supermarkets. Many of them implement commercial practices that hurt small scale producers and limit their independent entrepreneurship.

But one specialized supplier in Honduras, Hortifrutí, has a different business model. This company provides technical assistance to farmers for meeting the quality standards, and facilitates access to credit. Farmers are loyal to the firm and willing to supply its demand, because it reduces their uncertainty assuring the sales and paying on time. Some limitations are the high volume required by the company, what forces the farmers to buy from sub-contracted farmers.

Private companies usually prefer to deal with a small number of large-scale suppliers than with many small-scale ones. But under certain conditions they can be induced to source from small-scale farmers. Such conditions include: scarcity of alternative suppliers; the characteristics of the product; the possibility of gaining access to subsidized inputs and technical and financial resources; or gaining political and community goodwill. It is important to influence private policies –procurement procedure, quality standards, business ethics and corporate responsibility. But for achieving a true impact in rural development, it is essential the cooperation between the public and private sectors. Although an inclusive private sector may bring benefits for smallholders, it does not necessarily result in lasting economic empowerment beyond the trade relationship. That is why the partnerships between actors along the value chain, known as multi-stakeholder initiatives, are paramount.

By their own efforts, farmers may achieve better farm prices or gain access to cheaper inputs; processors can ensure appropriate marketing of their product; traders may improve distribution… But some challenges require concerted actions among different actors on the value chain. Then, the different parties decide to bring together, coordinate and reach agreements through formal or informal partnerships.
Producers, traders, processors, input suppliers, distributors and other complementary actors in the same commodity chain have established a formal type of organization for better functioning and to obtain the most of benefits. These chain partnerships bring together different actors with a common interest around one or more products, ensuring vertical coordination. They reach agreements around prices, quality standards, policies, commercialization or promotion, and help to balance the power relations between unequal actors. Through a chain partnership, all the technical, institutional, economic and financial details are reflected into contracts and agreements that tend to be much fairer than those negotiated individually.\textsuperscript{78} The state plays a regulator role, ensuring compliance of the rules.

Many of these partnerships emerged after liberalization processes that represented a threat to domestic production, with the objective of regulating markets and protecting certain products from new competitors. This is the case in many African countries, such as Senegal, where national authorities supported and gave a legal status to chain partnerships, defining principles such as transparency, open participation and equal representation.\textsuperscript{79}

The high diversity of chain partnerships makes it difficult to generalize. But evidence shows that they often lack a clear definition of functions, are poorly financed or do not represent the interests of the majority. The role of the state and its capacity to regulate, reconcile the interests of different actors and ensure compliance of agreements will be clue to their success. More than promoting their creation at any cost, it would be better to encourage processes of collective action and regulation, which may take different shapes. Private-public partnerships are among the most promising.\textsuperscript{80}

Many successful experiences show how multi-stakeholder associations facilitate the integration of small-scale producers into high-quality markets. The case of Normin Veggies, in Philippines,\textsuperscript{81} illustrates a concerted action between commercial farmers, smallholders, service providers, support agencies and local government. Vegetables in the Philippines are mainly grown by small farmers that are price takers in traditional wet markets. From 75 to 85 percent of vegetables pass through the traditional supply chain, where traders play a major role. But in recent years, large agribusiness firms have also ventured into vegetable production. Farmers from Northern Mindanao joined production and marketing efforts in Normin Veggies. They formed groups of small farmers allied with a commercial farmer, who coordinates the production process and trains in production techniques and quality standards. As a cluster, they achieve economies of scale in transporting, accessing development assistance and sharing technological and market information. They evolved from product-oriented to market-oriented practices, obtaining a product of higher quality that is sold at better prices. Today, Normin Veggies is a preferred supplier due to its capacity to respond to changes in market requirements.
Experiences like this show opportunities for small farmers in general, no matter their gender. But women play a fundamental role in rural development. Empowering them is essential, to participate in the opportunities of high-value markets. For example vegetables, whose demand is rapidly increasing in expanding urban markets, have been traditionally grown by women. The challenge is to ensure that they retain control over production, processing and marketing. In many societies, there is evidence of women directly excluded from the most profitable markets. Once a crop becomes lucrative, very often men try to take the control. This was the case in Kenya, where women have been traditionally associated with cultivation and selling of leafy vegetables. But whenever these crops became more appreciated in local and international markets, men displaced them out of the market.

On the other hand, some experiences exemplify women establishing profiting partnerships to participate in modern, high-value market chains. Through the partnership with private companies (an input supplier and a wholesaler), a group of Indonesian women have achieved to export high-quality fresh vegetables to the Asian market. They gained access to credit, high quality seeds, technical advice and a reliable market.

Another form of partnership is the contract farming. It has been viewed by many as an effective way to engage large buyers with small producers, providing them with the production resources and the market certainties they need. In the absence of collective bargaining capacity, legal advice and market information, there may be an unequal balance of power, and is therefore open to abuses. However, examples of innovative collaboration between farmers and retailers or traders prove that contract farming may be a successful way to access markets (see box 10).

**Box 10. Contract farming in practice**

**Contract farming in India**

In the Indian district of Punjab, contracting firms are sourcing from farmers able to supply tomatoes, potatoes and basmati rice according to their requirements. Returns are higher than those from non-contract farming, although the net profits vary depending on the season and product.

Large farmers offer larger volumes and better quality than the small ones, due to efficient business-oriented farming methods, better seeds and more intensive use of fertilizers and pesticides. They may take on storage and transportation costs and bear the risks in case of crop failure.

Small farmers have no power in fixing the prices or the terms and conditions of contract agreements, which do not include any provision of risk sharing. Although contract farming provides better market opportunities than the open market, it also involves a degree of uncertainty. In case of any shift in the contracting firm policy or priorities, the entire market for a commodity may collapse.

**Contract farming in Guatemala**

In Guatemala, compared to farmers selling only through traditional market channels, farmers selling to supermarkets are larger (but are in the upper tier of the "small farmer" category), have more capital, and are much more specialized in commercial horticulture in general and in tomatoes in particular. While they have higher yields, they also have
higher input use, including use of chemicals. In fact, they severely overuse pesticides and fungicides. Moreover, these greater input expenditures mean that their profit rates are roughly similar to those of farmers in the traditional market channel. The supermarkets, who do not buy direct but rather source from a few specialized-dedicated wholesalers, rely on this year-round supply, lower transaction costs, and consistency of quality.

**Procurement practices of supermarkets in Asia**

Supermarkets purchase large volumes and have created new systems of procurement in Asia. They deal with multiple channels of supply: large individual farmers (who often subcontract small farmers), specialized wholesalers and suppliers, and government-sponsored distribution centers and cooperatives. They demand high quality and negotiate low prices, therefore only efficient and large growers are able to work with them in the long run. They delay payment to suppliers up to as long as 60-90 days, despite regulations to pay within the week in some countries like Malaysia. Further, farmers need to make large investments in order to be able to supply to supermarkets successfully, despite facing high difficulties to obtain credit.

Some are gradually shifting to wholesalers specialized in a few products and dedicated to supplying one supermarket chain. In many countries, the leading chains are promoting “preferred supplier” systems in order to select producers or wholesales capable of meeting the stricter quality and safety standards. More rapid movement of produce from farm to store enables supermarkets to sell much fresher produce. To achieve this, supermarkets often require investments from the supplier that simplify movement of produce along the supply chain.

**Specialized trader in butter head lettuce in Vietnam**

The supply strategies of modern distributors and of some traditional traders who specialize in the supply of quality foods (for restaurants, schools and quality shops) have added some innovations to the practices witnessed in the traditional channels: formal contracts, joint conflict resolution and quality focus.

A trader specialized in butter head lettuce supplies five tons per day in one of Ho Chi Minh City’s wholesale markets with higher profits than competitors. To do this, he collaborates with several collectors. Knowing the requirements of the consumers, the collectors train farmers on growing, harvesting and packaging methods as per specifications of a good quality lettuce. The collectors pay the farmers 15 days in advance. The trader carefully coordinates distribution activities with his collectors and orders lettuce five days in advance of the expected delivery; hence the collectors can look for the required quality, unlike the other traders who order only on the same day.

In this case, there is a vertical flow of price information between collectors and farmers and with other wholesalers. The trader distributes benefits throughout the supply chain while still making a profit himself. Farmers benefit from an assured market, improved production capacity and higher profits.

In occasions, it is the public initiative, rather than the private, who incentives producers organizations to scale up their market clusters and gains. This was the case of Yulin watermelon cooperative in China (see box 11), where farmers shifted into an internationally competitive product.

**Box 11. Chain empowerment of a watermelon cooperative in China**

Farmers’ cooperatives are developing very fast in China, playing a key role in facilitating access to modern, high-value supply chains. The local government of Ruoheng, a formerly rice-growing region, supported in 2001 the creation of a watermelon cooperative. One of its first steps was to register the brand Yulin, unifying production, quality, packaging and sales.

The cooperative provides training in technical standards to the members and guarantees fixed wages to their employees. Profits are shared according to the transaction volume, what creates an incentive for members to invest
in boosting productivity. A risk fund has been set up to protect from natural disasters (typhoons and cyclones are quite frequent) and accidental costs.

For entering the cooperative, a producer must prove experience, some abilities in organizing and certain capital to buy a share. A system of “quasi-members” guarantees quality and efficiency and protects the interests of old members. Although production costs are higher for cooperative members, compared to non member practices (they use better seeds and machinery), farmer income has improved. This is due to a bigger production and a growth three-fold in prices (3.0 versus 1.2 yuan per kilogram) thanks to quality, packaging and the effect of the brand. The cooperative has been growing at a 20 percent annual rate, and it is expanding to other provinces in China. Yulin melons have been labeled as “green food” and are supplied all year round directly to wholesalers, supermarkets and retailers.

One of the factors for success has been the spillover effect of information, due to an efficient use and dissemination of knowledge. The brand Yulin, based on improved production methods, has become an intangible value shared by all the farmers in the region. The guidance and support from the Government to externalize some costs, especially in the initial stage, were also decisive.

The collective action of producers and the partnership with private and public agencies has been critical in the development of new, more profitable market niches. The increasing concern about the quality and safety of products in developed and emerging markets offers an unprecedented opportunity that farmers’ organizations are ready to take. Alternative options to the provision of high value products to retail chains like in the so-called ‘decommodification’ of traditional bulk products such as coffee, tea, bananas or cotton through organic and fair trade markets. These new markets, driven by consumer preferences, present both challenges and opportunities. Although they show important differences, both are emerging niches that seek to address the desire of the consumer for a 'better' food. Issues as safety and health, environmental and social impacts are relevant criteria for many consumers when taking purchase decisions.

Fair trade emerged more than forty years ago to establish alternative trading that ensures minimal returns, safe working conditions and environmentally friendly production. With the exception of a very few nearly saturated markets (e.g. Switzerland and the Netherlands), fair trade certified sales have been growing at annual rates of 30 to 40 percent over the period 1997-2007, especially tropical products such as tea, cocoa, coffee, and bananas. About a quarter of banana sales in the UK are fair trade. In 2008, global sales are estimated to exceed US $3.5 billion.

Along with fair trade, organics also present a great potential for small farmers. Global sales of organic food and drink have been increasing by over 5 billion dollar every year, reaching 46 billion dollar in 2007. If rates remain constant, global retail sales will approach 70 billion dollar in 2010. Organic vegetables stand for over 5% of all vegetable sales in northern European countries (exceeding 10 percent in some countries as Switzerland and Sweden).

Organic agriculture, in theory, seems to be very well suited for smallholders. It preserves traditional knowledge, reduces dependence on external inputs and is labor intensive. However, this growing and highly remunerative market is not accessible for all in practice. The high cost of
certification, insufficient research and extension on locally adapted organic practices or the costs of adaptation from conventional agriculture, especially during the transition period, are some of the barriers. Small producers generally rely on associations or the public sector to compete in these markets if they do not want to be excluded as large farms take advantage of this remunerative market. In Tanzania, the experience of organic cotton illustrates how a partnership between smallholder farmers and a trading house can bring benefits to all levels of the value chain (see box 12).

Box 12. Organic cotton from Tanzania

Cotton is one of the main agricultural commodities and involves millions of farmers in the world. But it is associated with critical social and environmental problems like intense use of pesticides, soil degradation, child labor, and persistent rural poverty. Disapproving these malpractices, Remei AG wanted to build an alternative business model around five key concepts of sustainability: quality product, organic production, fairness in prices, transparency in the supply chain, and care for ecology.

The first step was in the late 1980s. It consisted of building partnerships with spinning mills and textile manufacturers, in order to gain more control over the supply chain. The second step was in the early 1990s. Remei established own projects in India and Tanzania to produce organic cotton under contract with smallholder farmers. The third step was in the mid-1990s. Remei started partnering with retail firms and fashion brands in Europe, launching their own assortments of organic clothing on the market. From then on Remei had a fully integrated textile chain – from farmer to final consumer.

The Tanzania project started in 1994 in Meatu, a poor district in the north-west of the country. Starting with 45 farmers, the project grew steadily over the years and in 2000 it was transformed into a company: BioRe® Tanzania Ltd. Today, BioRe is Africa’s leading exporter of organically certified cotton lint. In 2008 worked with 2,000 contract farmers cultivating 11,000 ha to produce 8,000 tons of seed cotton. This output has a farm gate value of 3.5 million US dollar, and a FOB export value of 5 million US dollar.

BioRe works in 15 villages. It offers five-years contracts to the farmers. By signing the contract, the farmer promises to follow the regulations for organic production, to apply the advice of BioRe’s staff, and to deliver his entire yield to the company. In turn, promises to purchase the entire crop at a premium price (15 per cent higher than competing traders), to provide seeds and bio-pesticides, and to offer training and technical assistance.

BioRe encourages farmers to work together. The company sets up farmer field schools in each location, where farmers get together to learn about cultivation techniques, pest control, and other practical matters. One farmer is appointed as location leader. He is regularly trained on BioRe’s demonstration farm, and is expected to transfer this knowledge to the other farmers. The company also supplies farm implements, such as ox weeders, for the farmer groups to use collectively. BioRe is trying to empower the farmer groups as much as possible, so they can take up more responsibility in the chain. Ideally, they become shareholder in the company, as is already the case with BioRe’s sister company in India.

BioRe’s farmers not only benefit from a high price for their cotton. They also have lower costs of production than other farmers, because they spend less money on inputs. They obtain higher yields because the soil is in better conditions.

BioRe had a spectacular increase in turnover, from US$ 300,000 in 2000 to US$ 5 million in 2008. The company now employs 117 staff members, most of them from local villages. The BioRe training centre is developing as a regional centre of competence. In times of need the company supports the local community. During the drought of 2006 the
company provided daily lunch meals to 7,000 schoolchildren.

The projects with the farmers have enabled Remei AG to switch fully to organic cotton. The turnover of the company remained more or less stable at US$ 25 million (garments only), but the profitability more than tripled. Beyond this, all companies can be proud to be part of a unique textile chain that keeps up the highest social, environmental and quality standards. In 2002 their achievements were awarded at the UN World Summit for Sustainable Development in Johannesburg.

The export price of BioRe’s cotton lint is higher than the average Tanzanian export price, so it is not yet competitive. The company would not survive if its partner Remei were not willing to pay a higher price. The main reason of BioRe’s higher costs is the significant investment in training and technical assistance to the farmers. In the future BioRe needs to find a way to reduce its costs and produce cotton at a fully competitive market price.

BioRe has learnt that it takes time to build a healthy enterprise. After 14 years the company is still not in stable waters. To fulfill with the high quality standards, the company has invested heavily in training of farmers and staff, and in building an internal inspection system. This created a heavy overhead. The overhead now needs to be reduced by empowering the farmers and letting them take their own responsibility in the value chain.

Another key lesson is that a genuine partnership among all stages of the value chain provides for the best conditions to tackle the enormous challenges that need to be faced when building a truly sustainable business model with genuine benefits for the rural poor.

In Bolivia, onions are cultivated at 4,000 feet above the sea level without chemical inputs. In 2006, Oruro received international certification for organic sweet onion, opening new opportunities in the high-quality organic market. As a result, per capita incomes of 40,000 household participants in the Market Access and Poverty Alleviation Project increased by 50%.96

Down to the sea level, the Ecuadorian high value organic shrimp is now well established in the product range of the German seafood market leader Deutsche See and sold in other EU countries. Related enterprises (hatcheries, feed producers) benefit from changes induced by the new production system (less collection of wild shrimp larvae; responsible selection of feed ingredients; drastic reduction of chemicals and antibiotics). Alternative feed formulation replaces fishmeal by vegetable protein supplied by an organic farm. Other species on the embankments (aloe vera, almonds, fruit, and flowers) generate income, support organic honey production and provide wildlife habitat.97

Among these highly-remunerative markets, the new niche of natural products offers interesting opportunities to groups that have been traditionally excluded from conventional markets, such as indigenous peoples and women. They gather natural resources and take care of their preservation, holding the traditional knowledge about the different species and applications. This is the case of Phyto Trade Africa, where impoverished rural women gained access to fair trade and organic markets with their natural products (see box 13).
Box 13. PhytoTrade Africa – A chain partnership in natural products benefits Southern African rural women

The natural products industry has a high potential in the expanding personal care markets. The African continent is rich in biodiversity resources and in valuable traditional knowledge on their uses. But the communities that preserve them lack the capacity to invest in product development, the infrastructure needed to develop reliable supply chains, the knowledge about markets and the government support to become competitive.

These barriers are difficult to overcome without a collective action. In 2001 it was established PhytoTrade Africa - the Southern African Natural Products Trade Association - with the objective of developing income opportunities for marginalized communities in dryland areas of Southern Africa, based on their natural resources. It is a membership-based association operating in six countries: Botswana, Malawi, Namibia, South Africa, Zambia and Zimbabwe.

Members of PhytoTrade are private companies, non-governmental organizations and research institutions involved in producing, processing or trading natural products. The intervention is focused on developing chain partnerships to supply the natural cosmetic, personal and health care industries, nutritional products and herbal teas and jams.

One of the most important elements is the addition of value through the development of a product. For that, PhytoTrade has established collaborative research with high profile commercial partners. By the end of 2007, 50 new products and derivatives were developed, of which 29 have been launched to the market, showing a high capacity of innovation.

It has been also clue the provision of assistance in business development and the technical support to the members, what has resulted in effective supply chains. To expand market opportunities, PhytoTrade is constantly exploring new potential buyers through its offices in Africa and Europe. These include the sales agreements maintained over the last few years with Aldivia in France and Afrigem in South Africa.

All members are signatories to the Fair Trade and Environmental Charters. In 2007, 8 per cent of PhytoTrade products were certified by the International Fair Trade Association, 17 per cent obtained organic certification and 8 per cent both of them. Using sustainable harvesting techniques guarantees the survival of the species.

In 2007, more than 15,000 farmers (90% women) supplied raw or value-added natural products through PhytoTrade Africa. Members’ sales were up to US$1,501,313 in 2007 from US$845,389 in 2006. This 78 percent of increase was a result of several factors: better prices associated to certification; improved value of natural products marketed; an increase in the volume and improved shipping due to the consolidation of consignments to commercial partners.

Given that several countries and members are involved in the production of a particular species, supplies are reliable and continuous, even when climatic variations affect yields within one or two localities. The introduction of a twice-yearly shipping timetable allows all members to plan accordingly their production. Even when many members are relative newcomers to the natural products industry, the capacity development process enables them to meet time and quality requirements.

Since 1997, the European Union requires a formal approval for selling products not common for human consumption prior to this date. PhytoTrade Africa lobbied the European Commission to approve the sales of baobab pulp, considering its potential for development in Africa and the benefits that could flow to African farmers. After a process that took two years, in 2008 it was finally approved, an important impact on trade policies and a crucial step to develop a global market.

PhytoTrade Africa and its members have successfully engaged international agencies in their efforts, through developing networking opportunities and partnerships with research institutions, development organisations, specialist consultants and donor-supported consortia.

One of the objectives of PhytoTrade is to provide a legal framework that protects the intellectual property for the benefit of the poor rural communities. As part of the steps taken, the registration process was initiated in Botswana in 2007 and a patent for Maruline was launched in 2006.
Natural products are in expansion and offer opportunities especially to women. Traditional practices on cultivating and gathering natural resources in Samoa have found a place in the natural cosmetic market. In 1991, after finding very difficult to secure loans individually, seven women established a group: Women in Business Development Incorporated. With support from a number of agencies, the group has grown significantly since then and is now active in 150 rural villages across Samoa. It exports coconut oil, organic vegetables, honey and handcrafts to Australia, United States and New Zealand. Women involved in the project have experienced increased status in their villages due to their new economic power.

In the hills of central India and Nepal, there is also a rich repository of natural resources such as medicinal and aromatic plants, spices and mushrooms, which naturally grow in degraded forests and marginal lands. The vulnerable communities living in this region have not been able to fully capitalize on them, due to a very limited access to markets and basic services. But development planners and conservation advocates saw in them a potential for income diversification, food security and biodiversity conservation. Over 2,500 farmers (40 per cent women) have been trained in different aspects of medicinal and aromatic plants production, conservation, certification and trade chains.

d) Provision of infrastructure and information systems

As we have seen in section 1 of this chapter, isolation is a large correlate with poverty and exacerbates the marginalization of rural households. Improvements in rural infrastructure, such as roads and rail, create the possibility of bringing a larger share of the price eventually received at the end of the marketing chain to the farm gate, reducing the gap between farm prices and consumer prices.

Infrastructure development is a necessary component of rural development. Access to affordable physical infrastructure is a major source of competitiveness in agricultural value chains. This includes infrastructure that: supports on-farm production (irrigation, energy, transportation, pre- and post-harvest storage), ensures efficient trading and exchange (telecommunications, covered markets), adds value (agro-processing and packaging facilities), and enables produce to move rapidly and efficiently from farm-gate to processing facilities and on to wholesalers (transportation and bulk storage).

The importance of infrastructure is illustrated by the case of Vietnam, where road rehabilitation played a key role in market development, and increased the variety of goods that households sold. Improved infrastructure reduces the transaction costs and the overall costs of maintenance, services and transportation. It also allows less costly adoption of new technologies.
But creating more opportunities for the rural poor involves much more than roads. Investing in information access is also paramount. The combination of investment in market infrastructure, information systems and financial services was the basis of the Agricultural Marketing Systems Development Program in Tanzania, described in box 13.

In the context of agrifood markets, so dynamic and subject to volatility, communication infrastructure makes the difference for rural producers to gain market power. Internet and, far more important, mobile telephones grant smallholders access to the evolution about markets and prices, a resource that was restricted in the past to intermediaries and large producers. This is already the case in Kenya, Mozambique and Senegal, where market information systems disseminate price levels using a mix of internet, short message service (SMS), voicemail, radio, and market chalkboards. This is the result of a collaboration between the Kenya and Malawi Agricultural Commodity Exchanges; the Mozambique Agricultural Marketing Information System and the private company Manobi.

By linking communication technologies to market exchanges in commercial centers, even small farmers can overcome the enormous informational asymmetries that limit their bargaining power in traditional supply chains. The smart use of new technologies is allowing poor rural communities to become part of the information revolution. In Niger, the construction of cell phone towers reduced differences in grain prices across markets and lowered the variation in grain prices across seasons.

The following examples show how access to information can be translated into bigger market power and higher margins and salaries.

- **The Kutipay System in Peru** is a result of the *Corredor Puno-Cuzco* and *Sierra Sur* programs. They supported the access to information technologies by providing funds to local governments for creating internet centers and extending coverage. An Information and Marketing Promotion System was set up as a pilot project by a private company. Now, farmers obtain up to date information on prices and demand trends, strengthening their bargaining power. They also promote their products, establish market linkages and explore new markets.

- **The First Mile Project in Tanzania** links producers to consumers through information and communication technologies. Implemented by the Government of Tanzania, this seven-year program improved the structure and performance of the country’s food marketing system. By using mobile phones, e-mail messages and the internet, farmers share good practices and access relevant market information. It also facilitates mutual learning, collaboration and trust building along the chain. Farmers participating in this program have
improved their production and profits, strengthened their market power and accessed new markets.

- **E-Choupal in India**\(^{107}\) has expanded access to internet in rural areas. Up to 6,400 internet kiosks were set up between 2000 and 2007 by ITC Limited, one of the largest agricultural exporters. It reaches about 4 million farmers growing a range of crops - soybean, coffee, wheat, rice, pulses or shrimp - in over 40,000 villages. They get free information in their language about local and global market prices, weather forecasts, farming practices and crop insurance. It serves as a purchase centre, cutting marketing costs and allowing farmers to obtain a bigger farm price. It also facilitates to acquire high quality inputs at fair prices. *E-Choupal* makes use of the physical transmission capabilities of current intermediaries – aggregation, logistics, counter-party risk and bridge financing –while avoiding their control of the information flow and market signals.

- **TradeNet**\(^{108}\) is a West African trading platform based in Ghana, created by a private company working in partnership with public donor-funded projects. Its goal is to facilitate sharing of market information between farmers and traders across a dozen countries in West Africa via mobile networks and the web. It provides users with short message service (SMS) alerts for commodities and markets of their choice, as well as alerts for offers to buy and sell. Farmers receive real-time prices for more than 80 commodities from 400 markets across West Africa. Users can also advertise their products in free web sites, individually or collectively, substantially reducing transaction costs.
Conclusion

Commenting on his early career efforts to eradicate rural poverty during the Great Depression, the American economist John K. Galbraith wrote: “Agricultural economics left me with a strong feeling that social sciences should be tested by its usefulness”.

Looking at the contents of this chapter, one cannot help but recall Galbraith’s words. While the world is being shaken around them, the lives of 1.5bn rural poor remain desperately stagnated. Poverty is still an overwhelmingly rural reality, and the majority of poor smallholders remain excluded from the opportunities of agricultural markets. In ample regions of Africa, Asia and Latin America the increasing gaps between the richest and the poorest have been largely driven by the difference between urban and rural areas.

Only fifteen years ago, the efforts of most governments and international institutions were focused on changing this reality by driving poor communities out of the rural sector and into the more profitable urban economies. But this has radically changed in the last years. The arguments and the facts that we have described in the previous pages show that there is a strong economic case for poor small farmers in agricultural markets, as there is an ethical one. As the international community struggles to live up to the promises made in the Millennium Development agenda, incorporating the rural poor to the growth process has become of paramount importance.

The trillionaire rescue plan that was launched in response to the global financial crisis shows that there is a considerable scope for public intervention when the right incentives are in place. Agricultural smallholders should be the next in line for a historical rural poverty bailout that can match what FAO’s General Director has recently described as a “change of paradigm” in food markets. As in the case of the financial and industrial sectors, this response not only should involve a phenomenal capital injection, but also a profound reconsideration of the trade and investment rules that have squeezed the margins of poor farmers and workers, stolen their market opportunities and pushed them into a situation of extreme vulnerability.
Notes

1 With the exception of its last two paragraphs, this intro has been literally taken from Taylor’s background paper.
2 Poulton, et al. 2005
4 FAO Food Outlook, November 2008
5 Asian Development Bank (2008) ADB’s Response to the Food Crisis
6 FAO 2008.
7 FAO Food Outlook, November 2008
8 UNDP (2005)
9 IFAD (2009)
10 Brown (2008)
11 IFAD 2009
12 Oxfam International 2002
13 FAO Food Outlook, November 2008
14 IFAD 2009
15 Oxfam International case study
16 The average food prices in Cambodia increased by almost 40 % in 2008. The source of this example is the Cambodia’s Development Policy Research Institute (CDRI) (2008): Impact of high food prices in Cambodia.
17 IFAD (2009), IFPRI (2007)
18 World Bank (2009)
19 IPCC (2007)
20 UNDP 2007
21 Ibid.
22 Ibid.
23 Eliminating Drastic Food Price Spikes – a three pronged approach for reserves. Available at http://ifpri.org/PUBS/reservenote20090302.asp#read
24 The authors would like to thank Javier Pérez, from Intermón Oxfam, for his very useful contributions to this section.
26 OECD statistics
The EU agreed in 2001 to grant free market access for most products coming from LDCs countries (under the so-called Everything But Arms agreement), a concession that was somehow mirrored by the USA with the African Growth and Opportunity Act, which guarantees market access to most products from Sub-Saharan countries. Most recently, developed countries committed in 2005 to make at least 97 per cent of their tariff lines duty-free and quota-free for imports originating from least developed countries.

Oxfam International 2002

Oxfam International 2008a

The European urgency to close the negotiations has led to the fragmentation of the EPA negotiating blocs, making a mockery of regional integration objectives, and resulted in widely differing texts. Southern African Development Community, for instance, has thirteen members split between three different EPA negotiating blocs. All of the African EPAs are different and in only one region, East African Community, does more than one country have the same commitments as the others. At the other extreme is West Africa, where the only two EPA countries to have initialed have significantly different texts with different liberalization commitments.

UNDP 2005

Taylor 2008

Henson (2006)

Oxfam International 2009b

WB 2007

International Institute for Environment and Development 2008

Oxfam International 2004

Reardon (2008)

Taylor 2008

Oxfam International 2009b

Brown (2008)

Oxfam International 2009b

The World Bank 2007

Demeke et al. 2008

Escobal d’Angelo. Quoted in Taylor 2008

IFAD 2001

Oxfam International 2009b

IFAD 2001


Oxfam International 2008b

Taylor 2008

Replicated from Regoverning Markets Programme (Berdegué et al 2008).

The World Bank 2007
55 Oxfam 2009b
56 International Institute for Environment and Development 2008
57 Penrose-Buckley 2006
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