#### CHAPTER 1

# Global Dynamics in Agricultural and Rural Economy, and Its Effects on Rural Finance\*

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### 1 What's New in Agricultural and Rural Environment?

Global developments have profoundly affected the lives of rural households in developing countries. They need to be understood in order to discuss the prospects of rural and agricultural finance.

Three-quarters of the world's 1.4 billion extremely poor people live in rural areas, leading to the conclusion that poverty is a rural phenomenon.<sup>2</sup>

Whenever development stakeholders and bankers talk about financing agriculture or economic activities in rural areas in developing countries, they inevitably express reservations about risks, constraints, unprofitability, costs, and bad repayment records. These shortcomings stem from poor performance, state-owned agricultural development banks, agricultural development projects delivering loans within their credit components, and some special governmental programs. They may also stem from days when governments and state-owned firms or public trade boards had the monopoly of extension services to farmers and of the commercialization of strategic crops (for national food security or for export). It may also date back to times when villages were still quite isolated from the rest of the country, and when people still lived in subsistence economies.

However, those days are now long gone. A number of major trends have emerged globally, including in developing countries, which have deeply modified the overall landscape of the agricultural and the rural environment.

It is important to have an overview of the seven major changes that have taken place, impacting agricultural and rural economies. Among these changes, some

<sup>\*</sup> The preparation of the paper was financially supported by the German Federal Ministry for Economic Cooperation and Development (BMZ) via KfW development bank. The author is grateful to her peers in the review committee for their inputs and especially expresses her thanks to Michael Jainzik of KfW for his contributions to enrich the paper.

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See Alan Doran et al., "The Missing Middle in Agricultural Finance", OXFAM GB Research Report (December 2009), p. 8.

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could be considered as mega-trends since they are observed globally and have long-term effects:

- Liberalization of national trade in agricultural commodities;
- Demography and the place of youth;
- Migration as a way of life and an income/capital building strategy;
- Climate change risks and opportunities;
- Economic growth in emerging countries;
- Emergence of a middle class in urban areas in developing economies with different consumption patterns;
- Technology and, in particular, the phenomena of cell phone and Internet.

### 1.1 Mega-Trends Impacting the Rural Economy

Liberalization of Trade in Agricultural Crops

Along with structural adjustment and reforms that were conducted in the 1980s and 90s, many developing countries have liberalized their economies in different dimensions. In particular, their national agricultural markets as well as international trade in agricultural produce – both in food crops such as cereals and in cash or export crops such as coffee, cocoa, and cotton – became less controlled.

After decades of state monopoly for trading and marketing crops in most countries, this change first led to disarray at the level of small farmers and farmers' organizations, followed a few years later by a boom in new private actors. This filled the gap left by the closing down/privatization of many governmental structures.

The private actors involved are of all sizes and intervene at every possible segment of the commodity chain. Some are large firms, national or international, that bided for the acquisition of the state-owned firms. Some are large or medium trade companies. But what was the most remarkable was the number of micro and small entrepreneurs who took this liberalization as an opportunity to set up businesses in agricultural value chains. This is the starting point for new entrepreneurial behavior in the rural population in every local economy.

The result of the liberalization of the economy could be seen in the growth of GDP that has taken place in the vast majority of developing countries during the last decades. Countries that have applied deregulation reforms have performed significantly better than others. Reformers among African states have delivered a GDP growth in average two percentage points higher in the 2000 to 2008 period, compared to the group of non-reformers.<sup>3</sup>

<sup>&</sup>lt;sup>3</sup> See McKinsey Global Institute (MGI), "Lions on the move: the progress and potential of African economies", *MGI Research Report* (June 2010).

However, this liberalization has not necessarily resulted in a rise in prices of crops to local producers and, therefore, in income at the level of rural households, since it has been also combined with acceleration in globalization of trade and in unfair competition. Many small producers who are still lagging in a subsistence economy have not found the way into the new market environment.

Table 1, published by the Word Trade Organization (WTO), shows a correlation between the growth rate of merchandise exports and of GDP.

Table 1. Merchandise Exports and GDP by Region 2007–2010

Annual % change	2007	2008	2009	2010 <sup>a</sup>
Volume of merchandise expor	·ts			
World	6.5	2.2	-12.2	13.5
Developed economies	4.8	0.8	-15.3	11.5
Developing economies and	9.0	3.8	-7.8	16.5
Real GDP at market exchange	e rates (2005)			
World	3.8	1.6	-2.2	3.0
Developed economies	2.6	0.4	-3.5	2.1
Developing economies and	8.0	5.7	2.0	5.9

<sup>&</sup>lt;sup>a</sup> Projections

Source: WTO Secretariat.

After the 2008–2009 crisis, 2010 is expected to be an exceptional year in terms of the growth rate for trade; developing economies are counting on exports (16.5 percent) to pursue strong growth in GDP (5.9 percent).

In a decade or so, the GDP per capita of developing countries has doubled.<sup>4</sup>

### Demography and the Place of the Youth

Many analysts have been warning decision-makers about the phenomenon of everincreasing populations of young people who are going to represent more than 60 percent of the population in the developing countries.<sup>5</sup>

The youth are better educated than in previous generations and, above all, more mobile. They have been seasonal migrants, going to search for work in neighboring towns and cities, in wealthier regions within the country, in neighboring coun-

<sup>&</sup>lt;sup>4</sup> See IMF, "The World Economic Outlook Database", *IMF publication* (October 2009).

See David Lahm, "The Demography of Youth in Developing Countries and its Economic Implications", World Bank Policy Research Working Paper, Vol. 4022 (October 2006).

tries, and even across the oceans. This mobility has served as an eye opener for other ways of life, behaviors, and opportunities. Some who come from rural areas choose afterwards to settle in towns and cities. Others may go back to their villages to have a family but still aim at a better life than that of their parents. They bring new attitudes to rural areas. This includes innovations in production, commercialization, housing, and new qualities in relations with other members of the family and the community, such as the use of financial services like savings and credit in order to support investment.

Without over-generalizing on such a wide and crucial issue, one could observe that the rural youth in developing countries tend to be more individualistic. They are also more entrepreneurial in farming, like in the choice of crops to grow, in integration in value chains, in business links with others, be it fellow producers or buyers or bankers.

Girls and young female adults may be a little bit less determined to face the criticism of the family and the community; however, we also see a lot of them traveling to look for work. When they have the chance to escape from burdensome social structures, they will not go back to the village.

### Migration as a Way of Life and a Capital Building Strategy

Migration for economic purpose has been there since memorial time. The Chinese and Indian diaspora, for instance, can be found everywhere in the world and those who have succeeded abroad are now investing back home, both in highly qualified human resource and in capital, bridging markets, and cultures.

With the influence of the media and the facility of transport, generations of youth from developing countries are migrating abroad to find jobs, to earn money and send remittances back home: But they also experience a new life, probably with more freedom. It has become a way of life, even for the poor in developing countries.

Remittances from migrant workers represent billions of dollars or euros and account for a significant part of GDP of many developing countries. Migrants tend to come from poor and remote villages in rural regions. Hence, when they send money home, it is to families still living there. Remittances have become the main source of income in many rural regions in developing and transition countries and also very often the main source of investment in individual and collective infrastructure, for social and for productive purposes. For instance, in a region of Mali, such as Kayes, migrants have financed clinics, schools, warehouses, and small dams for irrigation, as well as health insurance systems. They are the best depositors in microfinance institutions (MFIs).

<sup>&</sup>lt;sup>6</sup> See AfDB and French Ministry of Foreign Affairs, "Le transfert de fonds par les travailleurs migrants au centre des efforts de développements en Afrique", (2008).

Studies that the author completed in the early 1990s on "life stories" of small entrepreneurs in developing countries (Asia and Africa) show that the vast majority has been able to accumulate their startup capital during their years of work abroad, where the pressure of family, relatives, and the community is reduced by distance and therefore allows for them to save<sup>7</sup>. It is often also an opportunity to observe the management of modern organizations, to get acquainted with banking services, and to learn skills. Micro, small, and medium-sized enterprises (MSMEs) created by these former migrants tend to be better run, grow faster, create jobs, and ultimately are more sustainable. For instance, in the Philippines the majority of small and medium enterprises (SMEs) in secondary towns, financed by the MFIs, are created by migrant workers who have stayed several years in Saudi Arabia or other countries in the Middle East. Far from being a problem, migration is being seen by local stakeholders as an asset for economic development of developing countries and of poor rural areas.

### Awareness on Climate Change and New Opportunities

The awareness of the impact of climate change on local production and economy is rather recent, at all levels. So is the awareness of what causes the deterioration of the environment and the responsibility that everyone bears to preserve and protect the environment, starting at the local level. Despite the negative effects on rural communities that climate change is likely to produce, the social and business reaction on climate change may also carry some chances. It needs at least to be taken into account because of its effect on rural economies.

It is not rare, for example, to see communities organizing themselves to prevent against desertification by planting trees, and to try to maintain arable land by constructing new dams or flood-control retention basins. A lot more solar energy-powered devices can be found in homes and offices, as well as in schools, health centers, pumps, and market places. Solar energy is being considered as an industry. Used water and waste garbage is retreated; recycling is seen as a potential business for firms from the private sector.

### 1.2 Mega-Trends Impacting the Agricultural Economy

Economic Growth in Emerging Countries and in the BRIC: Impact on Demand for Agricultural Produce

Economic growth in emerging countries and in the BRIC countries has been very substantial during the last few years. This growth has also been achieved through a very dramatic socio-economic change in many different ways. In China, for in-

<sup>&</sup>lt;sup>7</sup> See Renée Chao-Béroff, "Histoires de vie des petits entrepreneurs en Asie et en Afrique", *Fondation Charles Leopold Mayer* (2004).

stance, millions of rural dwellers have been mobilized to become workers in factories in cities and in the coastal areas. In terms of food and agriculture, this means a major shift from farmers producing crops to consumers to feed.

In India, China, Brazil, and many other emerging countries or even in the socalled Least Developed Countries (LDCs), rapid urbanization has led to a pressure on the supply for food that the neglected countryside and aging farmers have not been able to deliver. This has been, at least for a large part, the cause of the food crisis of the last few years.

### Emergence of an Urban Middle Class with New Consumption Patterns

The growth that developing countries have been experiencing during the last decade – steady for some, spectacular for others – has led to the emergence of a significant middle class. This middle class is made up of people who have a fairly good level of education, often double income households, living in cities as a nuclear family with fewer children than in traditional families. Their relative purchasing power is significant as a consequence of these factors.

The consumption patterns and habits of this middle class have also changed due to this new life style. They will tend to shop in supermarkets rather than in traditional markets. They buy more pre-prepared food in smaller quantities to suit the size of the family (nuclear) and of the lodging (apartments). They prefer better quality than large quantity. School children want to copy the way of life they see on television and in ads, which affects both their nutrition and their clothing.

This phenomenon is so widely spread globally that it has been part of the recent food and price crisis in major cities in the developing countries. For instance, according to observers in Dakar, the price of millet, the traditional staple food, has not rose much, while the price of imported rice increased tremendously in 2008 and 2009.

An urban middle class with a good purchasing power is the solvent demand and market that the agricultural sector of developing countries has been hoping for in order to boost its production. For instance, Basmati and perfumed rice are now grown in many African countries, competing with imported Asian long grain rice for the higher end market. However, the pre-conditions for success are to adapt the supply to the new demand via the appropriate distribution channel.

Increasing numbers of national and multinational corporations have seen it as a huge opportunity and are entering this market, building value chains in linkage with small and medium farmers. They are willing to invest in technical assistance, infrastructure, financial and non-financial services in order to retain serious suppliers who will deliver timely, quality crops.<sup>8</sup>

<sup>&</sup>lt;sup>8</sup> Cf publications on value chains listed in the bibliography.

### 1.3 Mega-Trend Impacting Both Agricultural and Rural Economy

### Technology and the Cell Phone and Internet Revolution

Cell phones and, to a lesser extent, the Internet have totally modified access to communication, information, and related services for a vast majority in the developing world. And for once, it is not only in capital cities and wealthy neighborhoods. For millions of people who had never had access to a land line and who were isolated from everything, cell phones have been a true liberation. This is the reason why the penetration of this technology has been so fast, so broad, and so deep regardless of its costs.

The cell phones and the Internet have radically changed the access to information for individuals and for enterprises, especially those who are operating in low-population density areas.

Information has always had a key role to play in economy and economic development. Prices for and availability of commodities (inputs, equipments) and crops on markets are key for balancing information asymmetry, enhancing bargaining power for farmers, and increasing flows of goods. The experience of e-choupal launched by India Tobacco Company in India, in building an information platform providing e-commerce support adapted to the rural areas, is an example of how Internet can be used to design a transaction model between farmers and a processor/seller<sup>9</sup>. In West Africa, cell phones provide market and price information to fishermen who then sell their catch where the prices are higher<sup>10</sup>.

Similarly, cell phone, MIS, and Internet are used by institutions to lower transaction costs for clients and for securing information when delivering services in rural areas. Technology has been also used to reduce costs in setting up weather stations allowing an innovative approach to a major risk mitigation mechanism<sup>11</sup>.

### The Agricultural and Rural Environment Today

In view of these major changes during the last few years, it is clear that they have radically impacted the rural economic and social landscape, and have modified the parameters for agricultural production in a quite positive way. There is a large, unmet demand for agricultural produce that could stimulate production for the first

See B. Bowonder et al., "Developing a Rural Market e-hub: The case study of e-Choupal experience of ITC", *Indian Planning Commission Report* (2002) and S. Sivakumar, "Streamlining the Agricultural Supply Chain: Lessons Learnt from E-Choupal", *Bazaar Chinta*, Working Paper, No. 35 (June 2005).

See the project of the Fédération nationale des GIE de pêche au Sénégal, "Internet et telephonie mobile pour l'acces aux prix agricoles", *International Development Research Centre* (April 2005).

See IFAD and WFP, "Creating Pathways Out of Poverty in Rural Areas: Managing Weather Risk with Index Insurance", WFP publication (2008).

time in many years; this demand is coming from a solvent urban middle class in the developing countries themselves.

There are new skills and new entrepreneurial spirit among youth including in rural areas that could be mobilized for the modernization of the rural economy and for agribusiness. Some have started investing in agricultural value chains. IT technology, particularly cell phone usage, has been easily adopted by large number of rural individuals and enterprises and is used to reduce information gaps and transaction costs. No doubt, these factors are essential for creating an enabling environment for investment in rural areas and in agricultural production. The private sector has clearly identified them and is aggressively entering the sector to take advantage of this favorable situation.

Hence, today, it is now possible to operate and finance agricultural and rural activities profitably. They are mostly run by entrepreneurs and enterprises that have assessed their risks, evaluated their potential gains, and made a well-thought-through investment. Today, modern agriculture in developing countries is, by and large, private-sector led and profitable. Lower-end rural households have developed a diversification strategy to mitigate risks and get regular income throughout the year. This strategy has been paying off and could be financed quite safely through adapted lending methodologies.

Over the last two to three decades, this situation could be considered as a unique chance for agriculture and off-farm activities to support significant growth for the rural economy in developing countries. Appropriate financing is highly needed to transform this opportunity into wealth creation.<sup>12</sup>

However, many challenges still remain, among others the negative impacts of climate change on production and productivity. This has led to tension over water and land, internally (between herders and farmers) or externally ("acquisition of farm lands by international buyers" – the issue of "land grabbing"). <sup>13</sup> Will these large farms operated by foreign companies create decent and sustainable jobs for local laborers or will they marginalize the most vulnerable? Other challenges are related to access to technical advisory services for small farmers where public extension services have been phased out and not replaced by a private service provider. How will they be able to cope with new technical problems/crop diseases? How will they be able to take up new varieties or improve the quality of their production?

A decade ago, major African political leaders and their partners, in the context of the New Partnership for Africa's Development (NEPAD in 2001) and Comprehensive Africa Agriculture development Program (CAADP in 2003) and later, the Alliance for Green Revolution in Africa (AGRA in 2006) analyzed this situation

<sup>&</sup>lt;sup>12</sup> See for instance McKinsey Global Institute (MGI), "Lions on the move: the progress and potential of African economies", *MGI Research Report* (June 2010).

See Article of Michael Pauron: "Terres achetées, quelle réalité", Jeune Afrique, September 26, 2010.

and found it promising. They have invested in developing new approaches to position themselves in what they see as a new opportunity. For instance, governments in SSA, <sup>14</sup> have focused their strategies for growth on agriculture as a major pillar and have thrived to build pro-active Public Private Partnerships. NGOs and TA providers have been innovative in developing methodologies to approach food security and agri-food value chains and offer new services to actors involved. <sup>15</sup> Banks and the cooperative movements have also set up dedicated departments to explore these new avenues.

With high competition in urban markets, some of which are near saturation, mainstream commercial microfinance banks have also recently been tempted to expand in the rural market and take part in this new agriculture boom. <sup>16</sup> Some have tried to deploy their existing products through rural branches and have met repayment problems on top of a major rise in costs. With existing products, the scope to reach a large segment of this agricultural and rural market may appear, depending on the context, to be quite limited. Some have called for expertise to assist in designing a rural and agriculture business line and are presently testing products before scaling up.

It appears that traditional and new players are interested. However, what seems to be even more obvious is the need for new sets of skills: knowledge of rural and agricultural economy, understanding of this specific market, opportunities and constraints, interactions between actors in a chain, in addition to financial analysis and product development. There are a range of new products, services, and innovative delivery mechanisms using technology to reduce costs while being physically present face to face with rural clients to build trust.

### 2 Emerging Models in Agricultural and Rural Finance

To talk about the new agricultural and rural finance, it is useful to provide some definitions and go back very quickly to the "old" agricultural finance and draw some lessons. In fact, the emerging models, both the modern rural finance model and the value chain financing model, have derived their basics from the lessons learned from the old models and incorporated best practices from microfinance, taking advantage of all the changes that took place in the environment while avoiding the major errors of the past.

<sup>&</sup>lt;sup>14</sup> Ex: Senegal Strategy for Growth 2008.

See the publications of the Rural Outreach Action Group-E-MFP, "Value Chain development and microfinance – Review of current issues", (2010); Calvin Miller et al., "Agricultural Value Chain Finance, tools and Lessons", *FAO* (2010) and IIRR, "Value Chain Finance: Beyond microfinance for rural entrepreneurs", (2010).

See the contribution of Meyer (2013) in this volume.

### 2.1 Definitions and Lessons from the Old Agricultural Finance

Three definitions are important:

- What is called microfinance is the provision of financial services to poor households that are excluded from conventional banks. It could be delivered in urban or rural areas and the clients could be involved in all sorts of income generating activities;
- What is called agricultural finance is the delivery of financial services to farmers/farming enterprises for their agriculture production activities. The farmers/farming enterprises could be large, medium or small;
- What is called rural finance is financial services delivered in a rural area, where there is no concentration of inhabitants and dwellings and where the major incomes are related with farm or off-farm activities.

Hence, normally, these three categories of financial services may not concern the same people, the same activities or even the same place where they are performed. However, for many decades and still now, poverty was a rural phenomenon and in developing countries, 60 to 70 percent of the poor were rural, living mainly of subsistence agriculture production. Therefore, it has been thought that poverty alleviation could be obtained by providing massive access to financial services to poor rural households.

Failures in agricultural finance in the 1970s and 80s, where agriculture was a governmentally led/dominated sector, are mostly due to:<sup>17</sup>

- Directed agricultural loans:
- Often provided by or through agricultural extension workers or agriculture development projects' staff with little financial culture and for whom loans are inputs included in technical packages;
- Subsidized interest rates, lax attitudes in loan recovery;
- Political interference, leading to the perception from borrowers, that those loans need not be repaid.

Hence, it is important to note that many of the causes for the failure of programs following this old paradigm are not related to the profitability of agriculture but are rather due to other external factors. However, the low profitability of agricultural production during those days remained the major reason why banks were reluctant to lend and farmers to borrow.

<sup>17</sup> See IFAD: "IFAD Decision Tools for Rural Finance", *IFAD publication* (2012) and Meyer (2013), in this volume.

### 2.2 Modern Rural Finance: An Emerging Model Drawing from Microfinance Best Practices

Modern rural finance is a positive combination of rural and microfinance, taking the best from both. From rural finance, it has integrated the lessons learned from strategies coming from the poor households themselves to diversify their income sources.

Many studies performed in poor and remote rural environment show that the households' budget has tremendously changed during the last decade or so. Next to income from agriculture and livestock, resources from trade, salaries (seasonal), and remittances have taken a much larger share and sometimes have over passed the former ones. For instance, a recent study done by Enda Inter Arabe, <sup>18</sup> a MFI in Tunisia, showed that 44 percent of the revenues of rural households come from other sources that agriculture: day wages (34 percent), salaries (21 percent), retirement pensions (19 percent), or trade (15 percent). In agriculture, small farmers also tend to diversify in order to mitigate price and market risks. In Burkina Faso and Mali, in a cotton-growing region, farmers use the capital accumulated from good years in cotton to invest in fruit trees, irrigated vegetable growing, and animal fattening, which has after some years almost totally substituted for cotton. <sup>19</sup>

Since poor rural households have diversified their income sources, it is important to provide loans not for one specific productive activity but rather for all the diversified economies of such households. Therefore, in sound rural finance, loan analysis is giving more attention to cash flow than in the profitability of the agricultural production activity for which the borrower has applied for and the terms have been matched with incomes from all sources at the different times when they are available.

Small farmers are often confronted with technical difficulties related to production: soil fertility, inputs, crop or animal illness, and no access to counseling since the phasing out of state extension services. This is a major risk for them. This risk is being mitigated by access to private agricultural business development service (BDS) providers who are now operating on a fee for service basis, even in rural areas. The cost effectiveness of such services is a key element to success as it has to be affordable and adapted to the needs. Grouping clients per catchment areas to reduce time and costs for delivery is essential. Access to such agricultural BDS has re-opened the perspective of running crop and animal insurance schemes sustainably and of using insurance as a risk mitigant for small farmers.

See GRET and CIDR, "Etude de marché pour le développement de produits pour servir les clients ruraux en Tunisie", AFD research report (2009).

<sup>19</sup> See Monitoring report for a Rural Finance Project in the Western Region of Burkina Faso funded by EDF and implemented by CIDR (2007).

Farmers are also confronted with climatic uncertainties that could affect their production. For many years, insurance schemes have been confronted with high costs for individual checking how crops have been affected in the fields. With progress in technology, costs for setting up mini weather stations in rural areas have been reduced significantly the costs of administration of payouts and therefore, insurance schemes based on weather indexes are now feasible. Satellite-based systems may give even greater opportunities for cost-reduction.

Health and access to health care remain a major risk for farmers since it conditions good working and productive conditions. Health microinsurance has been tested in different places by promoters, either by forming health mutual aid societies or for MFIs to partner as agents with insurance companies, to deliver this product to their clients. However, if the framework conditions are not favorable, provision of health savings and credit products could also serve as good risk mitigants.

In rural areas, being isolated is an important risk because services will be more expensive to be delivered, inputs will be more costly in retail, lobbying becomes inaudible by lack of critical mass, so is ability to attract buyers, processors, modern distributors. To address this risk, institutional strengthening of farmers' groups is essential.

### Box 1: Livelihood Finance: An Innovative Approach of Basix India

Hence, while looking at risks from the perspectives of clients it has lead to what Basix India call, the "Livelihood Triad", a holistic approach involving financial and non-financial services, institutional development, aiming at promoting all the different livelihoods of poor rural households. Basix was the pioneer of weather index insurance a few years back and has designed health, crop, and cattle insurance schemes in partnership with private insurance companies.

Basix India has two financial institutions in its group, a local area bank that is deposit taking and a NBFI. It provides loans to one million borrowers, insurance services to 1.5 million clients, and remarkably BDS to 500,000 rural entrepreneurs and small farmers who are paying a fee for service rendered.

### 2.3 Value Chain Financing, Borrowing from Private Sector Financial Services to Small and Medium Farmers

Brief Definition of Agricultural Value Chains and Value Chain Financing

A value chain encompasses the full range of activities and services required to bring a product or a service from its conception to its end use. It involves the sequence of productive (i.e. value added) activities leading to and supporting final use. Hence, the term from "farm to fork" for agro-food value chains. <sup>20</sup>

However, all the value chains are not well organized or structured. The landscape goes from a very loosely structured value chain where there is a multitude of small buyers serving a large number of markets, which is often the case for food crops serving domestic markets, to contract farming where a large, often multinational, firm is dominating and vertically integrating the whole process downstream, usually for an export market. There is also a variety of intermediary situations in between

There are short value chains where little value has been added from producers to consumers and longer value chains involving different levels of processing, conditioning, and distribution. Generally, the latter are those that are the most profitable and therefore the most promising to finance.

However, experience show that there are loopholes in all categories as behaviors condition the stability of relations between buyers and sellers. Ultimately, what really matters in a value chain is the width of the demand/market and the relative weigh of suppliers that will lead to a balanced negotiation and an overall win-win situation for both parties. The strength of a value chain resides in the sustainability of the relation between actors involved and a fair distribution of profit along the value chain. This is why a good analysis of value chains in a given market is essential to success in value chain financing. No financial intermediaries should enter this business unless they have done this exercise thoroughly and with the appropriate expertise.

The new approach that could be observed recently on the ground in developing countries is "value chain financing" (VCF) or using value chains as an approach to financing agriculture in an innovative and more secure way. A "value chain approach" means a form of financing that emphasizes the funding of actors that are connected among them and that are connected to the market. The links and securing the market outlet are the most important factors for success and loan repayment. Ultimately, the strategy in VCF is to ensure finance along the value chain in a continuum, and secure the outcome. This financial continuum could be provided by one player, i.e. a bank or an agribusiness company, especially in the case of an integrated value chain, but could also be developed in a partnership between different financial intermediaries which may complement one another in skills and in products.

See also the contribution of Swinnen (2013) on value chains and value chain finance in this volume.

# **Box 2:** Case in Fair Trade: The Experience of Starbucks<sup>21</sup> in Chiapas (Mexico)

Starbucks is aiming to have a sustainable supply of high-quality coffee by investing in the future of the coffee farmers and their communities in Chiapas through alternative loan programs and biodiversity conservation.

Farmers have access to loans that the commercial or traditional lending sector is unable to serve. During growing and harvest cycles, many coffee farmers dip into their modest reserves to cover expenses until they can sell their crops. Some farmers may even experience a cash shortage, prompting them to sell their crops early—and for less—to local buyers. Alternatively, farmers will sometimes borrow money at exorbitant interest rates until they can sell their crops. This cuts into their profits and sets up a similar scenario for the next year.

Starbucks provides funding to organizations that make loans to coffee growers, which will help them sell their crops at the best time to get the right price. The loans also help farmers to invest in their farms and make capital improvements. Starbucks provided with a US \$4.5 million loan to *Verde Ventures* to increase access to financial services to around 380 small-scale coffee producers in Chiapas. Most of these resources were made available in a three-year rotating fund to pre-finance or provide working capital for *C.A.F.E. Practices* and *Conservation Coffee* farms in Chiapas, with a loan-loss guarantee for 70 percent from the Starbucks Coffee Company. Loans are made against coffee contracts with Starbucks and require a 6 to 7 percent savings by the cooperatives.

In addition, to improved on-farm productivity, more than 5,000 hectares of on-farm forested land was set aside for permanent protection. These set-asides lands contribute to the restoration of El Triunfo biosphere reserve's 121,000 hectares of buffer zone, and the price benefits and debt reduction of the program will impact more than thousand people.

### Role and Positioning of Financial Institutions

The main lessons to draw from field experiences are the following:

Value chain financing works best when a tripartite arrangement, involving the farmers or farmers groups, the buyer/processor/distribution company and the bank in performing as contractually planned to assure the outcome of the operation, can be put in place. The contractual relations between the three players are the major substitute to formal guarantee. They are stronger when all parties have a long term market stake for which they are willing to sacrifice potential short term gains.

Renée Chao-Beroff, "Starbucks, Fair Trade and Conservation Coffee in Chiapas", case study in *Incentives that work for enhancing public private partnership in Local Eco*nomic Development (UNCD, 2010).

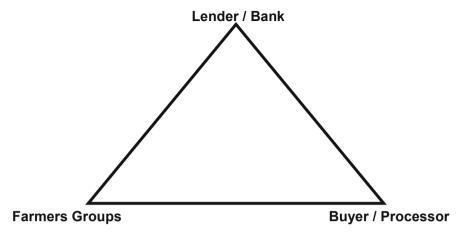


Fig. 1. Tripatite arrangements

In value chain financing, a financial continuum is often needed, both for operational considerations such as service delivery and repayment collection to farmers' door step where decentralized MFIs have their comparative advantage and for funding since different products and terms are needed when various actors/activities of a chain should be considered for financing.

### The New Agricultural and Rural Finance Paradigm

This new paradigm is the result of a positive combination of lessons learned from the causes of failures from old agricultural finance, application of microfinance best practises for rural households who have diversified their income sources, and the new opportunities provided by market-driven agricultural value chains.

It is about provision of a large range of financial products and services to different segments of the rural markets designed with specific clientele to fit their needs and constraints, including savings, credit, insurance, transfer, and payments. These products and services are provided in such a way that they can fit into a personal financial management strategy and enhance autonomy and empowerment of the excluded. Access to non-financial services could either be delivered by a department of the financial intermediary or through linkages with private agricultural BDS provider.

Whenever an organized value chain could be identified, financing could be facilitated through a tripartite arrangement where contractual relations between the farmers, the buyer, and the financial institution serve as a substitute for formal collateral. Even in this case, cash flow analysis of the borrower should constitute the basis of setting installments so as to have borrowers be responsible for their debt and align repayment calendar with all possible incomes.

IT can be used to systematize to lower costs, secure operations, and innovate. Technology is certainly a very strong pillar of this new financing since it can lead to significant breakthroughs. Hence, it could be considered as inclusive, holistic, responsible, and sustainable.

# 3 Potential Impact of New Agricultural and Rural Finance and Role of Major Stakeholders

In addition to realizing that modern agriculture could be good business for small farmers and, therefore, also a profitable investment for agribusinesses and for financial intermediaries, public donors, governments of developing countries, and large philanthropic foundations may also want to know if supporting this New Agricultural and Rural Finance will have meso and macro level impact and contribute to reaching aspects of the Millenium Development Goals. Agribusinesses and Financial Intermediaries will need to realize that modern agriculture is good businesses for farmers and also profitable investments for themselves. Public donors, governments of developing countries and large philanthropic foundations may want to know the impact of supports that they provide to this New Agricultural and Rural Finance, at meso and macro levels. All stakeholders are keen to understand how a successful endeavour in agricultural financing will contribute significantly to reaching aspects of the Millennium Development Goals.

### 3.1 Potential Impact at Micro, Meso and Macro Levels

At the micro level of rural finance, access to appropriate and adapted financial and non-financial services for small farmers will increase their incomes and enable savings habits, which in turn will smoothen households' and enterprises' cash flow and facilitate investment in productive means and living conditions. This will lead to a virtuous circle, out of subsistence into a modernized rural economy. Both livelihood and value-chain promotion have in common that it involves change management, transforming traditional and dependant individuals into rural entrepreneurs, making strategic decisions of diversification, of entering in contractual relations, of investment in agriculture as a business rather than a way of life and of managing the risks related to agriculture in a modern way. Empowerment could also be assumed as a major impact.

At the meso level, seasonal and permanent job creations for the youth in secondary towns and in value chains, are certainly a credible impact assumption. Better investment of remittances in MSMEs in the agribusiness sector should be considered if migrants see it as a good opportunity to set up a profitable business for themselves and a useful activity for the community. In turn, these jobs created and the investment from private sector leads to local economic development, sustaining local governments in countries where devolution is an important development policy.

At the macro level, successful agricultural and rural development built upon a private-sector-led approach would certainly have an impact on growth. And as this sector involves a majority of the population and most often the lower end segment, a spill over effect is likely. With appropriate policy, there should also be a significant impact on food security and food sovereignty for countries and regions that have been dependant.

## 3.2 Roles of Governments (Central and Local), Donors and Private Players in Supporting the New Agricultural and Rural Finance

Having a conducive environment is absolutely essential to transform this opportunity into growth, economic development and impact on people. For once, all stakeholders seem to agree on what is needed for success.

### Role for Governments

On the overall framework, governments at the central level should show strong support to entrepreneurship, as well as any form of economic initiative developed by the private sector, be it from the rural households, the migrants, farmers' groups, or from companies of all sizes, national or foreign. Incentives to invest in rural areas, add value to local products, and to serve the domestic food market should be put in place in the form of temporary tax exemptions, facilitation in getting licence to operate, reducing administrative burden, etc.

Specifically, a rural and agricultural finance policy could set a clear vision, the objectives that the country want to achieve, and define roles for all players. It will certainly specify the role that the government want to play and how it wants to promote and achieve public-private partnerships (PPP). Such a rural finance policy is either absent in many countries or is more of a agricultural and rural development policy rather than a financial sector policy that takes the specific needs of rural and agricultural finance in consideration.

Among others, governments can invest in IT infrastructure to lower costs for banks and MFIs using technology to further penetrate the rural markets. Local governments could very well be one of the major beneficiaries of the outcome of rural and agricultural value-chain financing, if investments are made in villages and secondary towns, if permanent jobs are created, and if tax for productive infrastructure is paid It could also play a promoting role by creating a attractive environment for entrepreneurs to invest and settle their business locally. Did I understand? This could be through the mobilization of research laboratories of universities to work with firms on new products, or usage of vocational training centers to provide adapted skills that firms may need or facilitate apprenticeship. In value chain financing, setting up a local or regional venture capital in joint venture with private sector and banks is emerging as an innovative funding vehicle to encourage entrepreneurship.

### 3.3 Role for Donors

The most important role for donors is building capacities at different levels. The financial intermediaries, banks, or large MFIs that want to expand in rural areas and/or finance value chains, will certainly need expertise in product development, as well as in designing the most cost-effective delivery mechanism. Reviewing the procedures including operation and internal control will be crucial to secure transactions. Adjusting existing management information systems and up scaling them may also be essential for efficiency and productivity. Training of staff and training of clients is another area where funding is needed. Finally, the financial institutions may want to set up a separate department or window dedicated to rural and agricultural finance: supporting it and assisting the institution in designing it properly is also a good investment for future growth.

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