ACCESS TO FINANCE THROUGH VALUE CHAINS: Lessons from Rwanda

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ABSTRACT

Financial services play a catalytic role in poverty reduction. In Rwanda, access to finance remains, to some extent, a privilege of those living in urban and semi-urban areas. This study highlights the potential value chains bear in terms of expanding and deepening access to formal finance in Rwandan rural areas, and the constraints limiting this access. A number of lessons learned are presented on how these constraints could be overcome.

¹ The author acknowledges the insights and assistance provided by SNV Rwanda Production Income and Employment team members (particularly François Sihimibo and Fidèle Nsengiyumva), as well as by Dr Charles Nach Mback and Dr Shirley Randell; managers, staff and clients of financial institutions surveyed, and various participants in value chains interviewed. The views and any errors contained in the paper are the author’s alone.
1. INTRODUCTION

Access to finance is important for poor households to take advantage of new business opportunities, expand income-generating activities, and cope with shocks and life cycle events. Poor people, particularly those living in rural areas, need savings, credit, cash transfer, and insurance services in the same way as others who are not living in poverty do.

In Rwanda, as is generally the case in developing countries, such services remain mostly a privilege of those living in cities and towns. The outreach of financial services in rural areas is still very low. As an example, less than 6 percent of rural dwellers hold a saving account in a formal finance institution (MINECOFIN 2007). Informal finance is so popular that 73 percent of total population reported using informal loans in 2005 (see table 4 in Annex 1). The risk inherent in doing business in rural areas—be it in agriculture or off-farm activities—due to asymmetry of information, was identified as the most important factor that causes bankers to shy away from rural ventures (Habyalimana, 2005).

A value chain\(^2\) approach presents a number of features which can serve those willing to expand financial services into underserved rural areas. Indeed, as Nagarajan and Meyer put it, "financial institutions may benefit from linkages with traders to expand rural finance, especially in poor and remote areas" (2005:24). A good example is the situation whereby a trader with a good reputation (known as a reliable buyer) can "vouch for" smaller producers s/he trades with, making them *ipso facto* attractive potential clients for financial services providers (Charitonenko *et al.*., 2005:3).

The few case studies written on value chain financing in Rwanda highlight that some experiences that tried to use value chains as conduits to channel money into the rural sector have been of limited impact on producers and small farmers' income, as they generally target marketers and traders involved in the chains (Nsabimana, forthcoming; Habyalimana, forthcoming). As a result, gaps remain at other intervention points of the chains, leading to overall inefficiencies. This has been documented for honey value chain (Habyalimana, forthcoming), and sugar-cane supply chain (Nsabimana, forthcoming).

Using coffee value chain as an example, this paper seeks to find out the actors actually reached by institutional finance, as a result of their involvement in the value chain, and constraining factors for those who are excluded. The study will be restricted to saving and credit products for value chain actors, with a particular focus on credit.

Drawing from documented cases, interviews and questionnaires addressed to coffee value chain actors in Rwanda, as well as from secondary information, this paper seeks to contribute to understanding—
- What is the potential niche for financial providers in the value chains, and how can this potential be unleashed?
- Why formal financial services providers have limited presence in value chains development in Rwanda.

The next section gives background information to the study. Section three examines the potential to increase and deepen outreach in rural areas through value chains. In section four, challenges and factors constraining effective use of value chain mechanisms to increase access to financial services by chain actors are highlighted. Section five identifies major emerging lessons, while section six draws some concluding remarks.

2. THE FINANCIAL SECTOR IN RWANDA

Rwanda is a tiny\(^3\), landlocked country\(^4\). It ranks among the least developed countries of the world\(^5\). Its banking system is composed of six private banks, operating from major towns; a government-owned development bank—Banque Rwandaise de Développement (BRD)—based in the capital, Kigali; and a housing

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\(^2\) In the context of this paper, for the sake of simplicity, the terms "value chain" and "supply chain" are invariably used to refer to a set of linkages between actors where there are no binding or sought-after formal or informal relationships, except when the goods, services and financial agreements are actually transacted, even though a value chain may be defined as "specific type of supply chain" where "the actors actively seek to support [each] other so they can increase their efficiency and competitiveness." (KIT, Faida MaLi and IIRR, 2006: 3). Kaplinsky and Readman further explain that such linkages aim at carrying out a "full range of activities which are required to bring a product or service from conception, through the different phases of production (…), delivery to final consumers, and final disposal after use." (2001:28)

\(^3\) 26,338 square kilometres, 89 times smaller than the neighbouring D R Congo, and 1.6 times smaller than The Netherlands

\(^4\) Rwanda is located between Uganda in the North, Burundi in the South; Tanzania in the East, and Democratic Republic of Congo in the West.

\(^5\) In 2003 Rwanda was ranked 13\(^{th}\) poorest of the least developed countries in the world (Bonfiglioli, 2003): 56.9 percent of its population (9.1 million) lives on less than US$0.45 equivalent a day, the poverty threshold in Rwanda (MINECOFIN, 2007).
bank, also located in Kigali. A network of 145 Banques Populaires, working as saving and credit cooperatives, has done a remarkable job to reach remote rural areas: 90 percent of their outlets (branches) are decentralised to sector level and almost each sector has its own Banque Populaire (Habyalimana, 2005).

Four insurance companies, including one owned by the government, work from Kigali, with some service outlets in major towns (Ibid.).

Microfinance initiatives mushroomed from 2002, primarily as a response to the weak involvement of the traditional banks in small and micro enterprises, and rural areas. Sixty-three microfinance institutions were licensed in 2006. Unfortunately, due to challenges in rural Rwanda, they too reached rural towns, while the remote villages remained underserved (Ibid.).

Commercial banks are well established in the country, while microfinance institutions are still inexperienced, characterised by weak management information systems, and limited consideration of best practices (Niyonsenga, et al., 2007). Thus, commercial banks remain the major source of formal financial services in Rwanda: in 2005 they contributed up to 76 percent of credit to economy, and up to 75 percent of savings mobilized (MINECOFIN, 2007).

In spite of such a remarkable presence of formal finance providers in Rwanda, their outreach remains shallow and unevenly distributed across the country, with some areas "well-off" and other still untapped. Fitch Ratings estimates that penetration of domestic credit to the private sector is underperforming, with 11 percent of GDP, compared to 18 percent of GDP for peer countries (MINECOFIN, 2007).

In rural areas - where nearly 92 percent of the poor live (Mugabo, et al. 2005) - only 25 percent of the population has access to formal credit (NISR, 2006), and only 3 percent accessed credit from traditional commercial banks (Habyalimana, 2005). The primary source of loans remains the informal sector: 73 percent of loan recipients claimed to resort to friends, traders and relatives to get credit (NISR, 2006).

Such a high prevalence of informal finance is assumed to be a symptom of dysfunction in the formal financial system. The next two sections highlight the mismatch between the demand and supply of savings and credit products in rural value chains (with a particular emphasis on the coffee value chain).

3. HUGE POTENTIAL IN RURAL VALUE CHAINS...

The demand

Lobry and Nkurikiyinka analyzed the coffee value chain in Rwanda in 2005, and identified over 2 million people (23 percent of total population) directly drawing income from coffee value chain. The current level of outreach by existing formal finance providers is 1 million (Niyonsenga, et al., 2007). Assuming that each coffee grower’s household would require access to saving and credit from formal providers, this should involve over 40 percent of total outreach. However, in a survey carried out on 125 coffee chain actors in Mbati region, only 3 percent coffee producers in the sample accessed savings facilities, while only 15 percent accessed credit (Table 1).

The demand is real, as over 90 percent and almost 82 percent of coffee producers who responded in this study reported needing saving and credit products respectively. Even among the coffee producers who reported having access to saving and credit services, over 61 were ‘not satisfied’ with the products they accessed, and 32 percent were merely ‘satisfied’.

For comparison, an examination of other value chains consistently reveals existence of considerable unmet demand. In the honey value chain for example, only 4 percent among the 2,312 beekeepers identified in

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6 A sector is an administrative entity under the district. A number of sectors make up a district.
7 The country is very hilly, people scattered around hills and a poorly maintained and scarce roads network makes transport very challenging.
8 E.g. the former Gitarama, in the centre, counts 11 microfinance institutions.
9 Ngororero, Nyabihu, Rutsiro and Gisagara districts, among others, are not currently reached by financial institutions.
10 Fitch Ratings is a global rating agency which provides credit markets with “independent, timely and prospective credit opinions”. Its services have a worldwide coverage (90 countries) and is dual-headquartered in New York and London. For more details, refer to www.fitchratings.org
11 Actually, 400,112 households owned a coffee tree farm in 2005. The average family size in Rwanda is 5 people (Mugabo, et al. 2005).
12 Mbati is a coffee growing region located 58 km from Kigali, in Muhanga district. Each of its 1,140 households owns a coffee farm, in addition to other farming activities, as coffee growing was compulsory when the government distributed land to those willing to settle in the region in 1975 (Habyalimana: interview with the executive secretary of Mbati sector, 15 March 2007).
Kirehe district had managed to secure credit from the two microfinance institutions established there (Habyalimana, forthcoming).

In sugar-cane supply chain, Caisse des Affaires Financières (CAF) Isonga is the only microfinance institution working with the chain actors in the Nyabarongo valley. In addition to its usual clients, Isonga provides credit and savings to middlemen who buy and deliver sugar-cane to Kabuye Sugar Works factory in Kigali.

Table 1: Access to formal finance by coffee value chain actors

<table>
<thead>
<tr>
<th>Actors</th>
<th>Products needed</th>
<th>Products accessed</th>
<th>Level of satisfaction</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
<td>Total</td>
</tr>
<tr>
<td>Inputs retailers</td>
<td>3</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Producers</td>
<td>66</td>
<td>48</td>
<td>114</td>
</tr>
<tr>
<td>Middlemen</td>
<td>4</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>Buyers</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Transporters</td>
<td>2</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td>76</td>
<td>49</td>
<td>125</td>
</tr>
</tbody>
</table>

Source: Habyalimana: Data from field survey on 125 coffee chain actors in Mbati, March 2007

Each middleman uses on average 65 people to harvest; sort haul to collection points, load and offload sugar-cane. The small producers (4,822 in Rwahi, the area surveyed) cannot afford delivering their product straight to the factory, as transport cost (US$27 per metric ton, on average) is beyond their capacity, and also because their individual production, is very small (1.2 metric ton on average, every 18 months) before bulking by middlemen. In addition, the factory buys its raw materials (sugar-cane) on credit, and repays two to four weeks after effective delivery.

Twelve percent of 100 surveyed sugar-cane laborers had obtained advances from their employers (the buyers) in the last 12 months, for different reasons (ceremonies, medical care, school fees, and food for the family). However, none had obtained credit from CAF Isonga, and none had opened a saving account with the institution (Nsabimana, forthcoming).

Table 2 shows that CAF Isonga had opened 28 and 185 credit lines for sugar-cane dealers in 2005 and 2006 respectively. Building on borrower-lender relationships already existing in the chain, the institution could have expanded its outreach in the Nyabugogo valley region, and reached the poorer daily laborers and producers in the chain, as displayed in the following table:

Table 2: Number of potential clients in Rwahi sugar farms

<table>
<thead>
<tr>
<th></th>
<th>2005</th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>Actual number of credits to sugar cane middlemen*</td>
<td>28</td>
<td>185</td>
</tr>
<tr>
<td>Number of people who could have been reached through middlemen Laborers**</td>
<td>1,820</td>
<td>12,025</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of people who could have been reached through middlemen Producers***</td>
<td>4,822</td>
<td>4,822</td>
</tr>
<tr>
<td>Total potential loan clients</td>
<td>6,670</td>
<td>17,032</td>
</tr>
</tbody>
</table>

** Source: Survey in Rwahi, April 2007.
*** Source: Habyalimana: interview with the “Chairman” of sugar cane producers’ association in Rwahi; 11 April 2007.

Indeed, assuming that each laborer and each producer needed and could access a loan from CAF Isonga, the institution could have increased its outreach in sugar-cane supply chain in Rwahi by over 17,000 loan accounts between 2005 and 2006, instead of the current increase of 157 loan accounts (see Table 2). These three examples provide supporting evidence for the hypothesis that there is huge potential in value chain for institutional finance providers. Do they take advantage of such a demand?

13 These are only individuals, as one integrated cooperative retails inputs in addition to marketing activities for primary processed coffee.
14 According to Kabuye Sugar Works financial officer, Jean Népomuscène Karake, interviewed by Habyalimana on 12 April 2007.
Limited supply...

Only 22 percent of respondents in Mbati coffee chain actors’ survey (125 individuals) had accessed credit from formal providers (Figures 1 and 2). The remaining 78 percent turned to informal sector, particularly to moneylenders (40 percent). Figure 2 highlights the importance of money lenders as a share of total informal sources: 51 percent. A striking finding in this sample is how limited is the access to commercial banks (0.88 percent of the sample: Figure 1)

Figure 1: Where did you get credit from?

![Bar chart showing the source of credit for Mbati coffee chain actors.](source)

<table>
<thead>
<tr>
<th>Source</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCDI</td>
<td>0.88</td>
</tr>
<tr>
<td>DUT</td>
<td>2.63</td>
</tr>
<tr>
<td>COO</td>
<td>4.39</td>
</tr>
<tr>
<td>BP</td>
<td>3.51</td>
</tr>
<tr>
<td>NGO</td>
<td>5.26</td>
</tr>
<tr>
<td>RIM</td>
<td>6.14</td>
</tr>
<tr>
<td>Mlen</td>
<td>39.7</td>
</tr>
<tr>
<td>ROS</td>
<td>15.8</td>
</tr>
<tr>
<td>Trad</td>
<td>3.51</td>
</tr>
<tr>
<td>Frien</td>
<td>14.9</td>
</tr>
<tr>
<td>Other</td>
<td>3.26</td>
</tr>
</tbody>
</table>

Source: Habyalimana: Data from survey in Mbati, March 2007

Figure 2: Formal vs Informal credit

![Pie chart showing the source of credit for coffee producers.](source)

Source: Habyalimana: Data from survey in Mbati, March 2007

Such a prevalence of informal finance is an evident sign of shallow supply by formal institutions, because their terms and conditions appear to be more favorable than those applied by the informal sector. As an illustration, loan terms for credit from formal sector ranged between 6 and 12 months, while loans from informal sector were very short term: one week to three months. Interest rates charged by formal providers were between 1.5 and 2.5 per month; which is close to 18 to 30 percent per year. Anecdotal evidence reports interest as high as 10 percent per month among moneylenders, which is in the region of annualized interest rate of 120 percent.
Thus, limited access

The previous paragraphs highlight an evident gap between the demand and the supply for formal (institutional) financial services in rural value chains. Direct finance (embedded in value chains) is also weak, as profiled in the case of coffee producers in Mbati, where only 4 percent had accessed credit from traders, and another 4 percent from producers’ cooperative (in the form of advances: see Figure 1). Less than 1 percent accessed credit from a commercial bank (Bank of Commerce, Development and Industry, BCDI), and 12 percent from microfinance institutions (Duterimbere, Banques Populaires, and RIM). The remainder uses informal sources of credit (traders, producer cooperatives, friends and relatives, rotating saving and credit associations, money lenders, and other informal sources).

Access is not evenly distributed among the chain actors surveyed: indeed, over 90 percent of coffee producers surveyed reported an interest in saving products, but only 3 percent accessed such products. As to credit, 92 percent of coffee producers in the sample reported being interested in it, but only 15 percent reported having accessed it. Other non-producer actors seem to have access to formal financial products (see Table 1 and Figure 3). Paradoxically, the proportion of those who accessed credit is higher than those who accessed saving products.

Beyond the scope of the sample in Mbati, Lobry and Nkurikiyinka (2005) also studied the status of access to finance for coffee value chain actors in Rwanda. Coffee value chain actors were interviewed in Kamonyi, Rulindo and Kirehe districts to complement the study’s findings. Drawing from these two sources of information, the following paragraphs highlight the status of access to finance for coffee value chain actors in Rwanda.

Input suppliers: Large input suppliers (Agrotech and Agrophar for pesticides and fertilizers, Institut des Sciences Agronomiques du Rwanda for seeds, and Office des Cultures Industrielles du Rwanda for pesticides) distribute inputs to small retailers located in the villages. Both large suppliers and local retailers are consistently linked to commercial banks (large banks located in Kigali for large suppliers and the Popular Banks for local retailers) for saving and credit services.

Producers: Producers are divided into two sub-groups: large “progressist” producers (e.g. Nkubili), who employ salaried labour, own coffee washing stations, and have more than 74 acres (30 hectares) of coffee tree plantations. These producers occupy about 0.6 percent of total planted area. They have consistently accessed investment credit from Banque Rwandaise de Développement (BRD) and own saving accounts with commercial banks such as Bank of Kigali, Bank of Commerce, Development and Industry; Banque Commerciale du Rwanda, BANCOR and COGEBANQUE.

Fig. 3: Access to finance by coffee producers in the zone surveyed

![Access to Finance by Coffee Producers in Mbati](image)

Source: Habyalimana: Data from field survey in Mbati, March 2007

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15 Figure 4 in Annex 1, shows the coffee sector map, and actors involved.
Smaller producers, who occupy the majority of the total planted area (99.4 percent) resort to loans through the informal sector, as profiled in the case of Mbati sector (see Figures 2 and 3), and have very limited access to commercial banks (0.88 percent).

In a hypothetical scenario whereby credit would be systematically extended to small coffee producers, whatever the security provided through value chain mechanisms, the total breadth of outreach by formal finance providers would increase by more than 100 percent in Rwanda.16

Producers’ associations and cooperatives: The same producers are sometimes grouped into associations and/or cooperatives. Some cooperatives have managed to access loan from commercial banks, in order to put coffee washing stations in place, or to collect products (coffee Sherries and beans) from producers. They also use membership fees as an alternative source of income. However, lack of money to ensure effective commercialisation of inputs and production is considered the major bottleneck for many cooperatives. In 2004, in order to overcome this problem and ensure that more than 32,000 households grouped into cooperatives (Lobry and Nkurikiyinka, 2005) have access to credit, the Government of Rwanda, via its agency to promote coffee value chain, Office des Cultures Industrielles du Rwanda (OCIR-café), opened a credit line of US$190,000 in Banque Rwandaise de Développement (BRD). The credit line aims to boost coffee production via seasonal trade loan to such cooperatives. The mechanism was developed after the government noticed that “producers were reluctant to deliver their production on credit and required cash transactions” (Lobry and Nkurikiyinka, 2005:17), which most of the cooperative could not afford, due to their limited resources. Even when the credit line facility was increased three times later on in 2005, there was still a widely felt gap across the cooperatives.

Coffee washing stations: There are now 55 coffee washing stations across the country. A coffee washing station requires an initial investment of US$130,000 (Lobry and Nkurikiyinka, 2005:88), which is in the range of products delivered by traditional commercial banks, but beyond the capacity of microfinance institutions. However, both types of institutions hesitate to provide such investments, and donors initiatives such as Assistance à la Dynamisation de l’Agribusiness au Rwanda (ADAR), Association and Cooperative Development International /Venture and Overseas Cooperation Assistance (ACDI/VOCA) and Partnership for Enhancing Agriculture in Rwanda through Linkages (PEARL) had to intervene, providing subsidies averaging US$72,000 per coffee washing station. The European Union’s STABEX project provided US$30,000 on average. Producers and producers associations’ own contribution averages US$28,000, or 21.5 percent (Ibid.). Their own contribution is secured from loans contracted from commercial banks (Popular Bank, Bank of Kigali and Banque Commerciale du Rwanda).

In addition to its subsidy scheme, ACDI/VOCA developed some risk-sharing mechanisms with local banks, to lower their risk aversion and provide incentive to invest in this business. The scheme involves a guarantee fund worth US$1, 5 million.

Coffee hulling factories: All coffee hulling factories (Rwandex, Rwacof, Agrocoffee, CBC and SICAF) have been established by large trade companies, who have access to various sources of funds: shareholders equity and loans from BRD and commercial banks. Two small plants (Maraba and COOPAC) benefited from donor support (Ibid.) and secured loans from local banks (Popular Bank).

Coffee dealers and buyers: In the marketing link of the value chain, middlemen collect coffee beans from door to door, bulk them, and deliver them to large buyers, who transport them to Kigali (mostly to Rwandex) for hulling and export. The middleman located in our survey area (Mbati) used a loan from BCDI and also advances from the buyers he supplies in coffee. His remuneration is a commission of 10 francs (US$0.02) per kilo. Almost each village counts a middleman, but some middlemen extend their services over more than one village. Large buyers are generally located in Kigali.

In a nutshell, access to finance is very limited for coffee producers, while other actors seem to be well connected to various finance providers, in spite of many challenges. These are discussed in the following section.

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16 Optimistic estimations (Niyonsenga, et al. 2007) evaluate at 1,000, 000 the current outreach of formal financial institutions. Assuming a family size of 5 people (see footnote 12), people drawing income from coffee are estimated at 2,000,560 people. With a proportion of active headcounts of 56 percent (Mugabo, et al. 2005), the total number of potential clients would reach 1,120,313 in the coffee sector.
4. CONSTRAINTS AND CHALLENGES

Interviews with value chain actors highlighted the following challenges and constraints hindering smooth provision of finance through value chains in Rwanda:

- Large volumes of money injected in value chain development by the government and the donors on a non-commercial basis
- Producers who are not organized
- Fluctuating prices of value chain commodities
- Crop diseases
- Lack of viable markets for value chain products
- Limited knowledge about value chain and value chain actors among financial services providers
- Over-indebtedness of those living in rural Rwanda
- Lack of internal capacity to assess loan applications and business plans among most of financial services providers
- Challenge to ensure that credit is used for production, and not for consumption
- Side-selling of value chain products by producers

5. EMERGING LESSONS

The following lessons can be learned from the Rwandan experience in financing value chains:

- Grants and subsidies are sometimes necessary to jump-start investments in value chains, but prolonged and widespread use of such instruments risks crowding-out private potential investments and, to some extent, jeopardizing the financial viability of currently existing privately-owned initiatives.
- Value chain relationships offer advantageous features on which formal finance providers can build to expand and deepen their outreach.
- The potential of value chain to leverage access to formal credit by chain actors lies in the chains’ ability to improve their credit worthiness through improved market access, quality control, production and price risks mitigation.
- Traditional market assessment tools should be used in tandem with value chain analysis tools for institutions willing to embrace value chain financing, to ensure that appropriate products for value chain actors are developed.
- Guarantee funds and other government and donor guarantee mechanisms have limited impact on access to finance by chain actors, particularly poor rural dwellers, if not properly marketed (awareness raising is crucial to the success of such initiatives).
- Credit for value chain functions (production, processing and marketing) should be coupled with credit for consumption smoothing, particularly for poor chain actors, to avoid risks of credit diversion and subsequent repayment defaults.
- Effective access to finance by actors at each link of a value chain requires improved synergy between finance providers, capacity builders and marketing services providers.
- In contrast with widespread beliefs (see for example Fries and Akin 2004), medium and long term investment capital can be leveraged for value chain actors, as long as it is backed by sound guarantee mechanisms, which reduce risks undertaken by financing institutions.
- Microfinance cannot address needs for finance across the whole value chain, as some links require long term investment capital, and others large amount of money beyond microfinance boundaries.
- For an effective development of a value chain, financing mechanisms should, as much as is possible, target all the links, to avoid distortions within the value chain.
- Training loan officers from banks on value chain analysis and developing their knowledge about the value chain reduces bankers’ reluctance to finance the chains.
- Quality business plan presented to a banker is in some cases better than expensive guarantee mechanisms.
- Transparency and sound financial management are crucial for producer associations and cooperatives to access formal sources of credit.

6. CONCLUSION

There is a need to expand the outreach of financial institutions in Rwandan rural areas for effective poverty reduction. Value chains may constitute an interesting niche for those willing to do so. The good news is that

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17 See Annex 2 for details related to these challenges and constraints
institutions which have an interest in expanding financial outreach through value chains will not start from the scratch: there are well-established existing relationships between chain actors which can be built on.

In addition, value chains actors make up a large unmet demand for institutional finance: in Rwanda, access to formal finance by only coffee producers would more than double the current breadth of outreach, as demonstrated by this study.

However, a number of constraints and challenges which make formal financial institutions shy away from getting involved in value chains financing need to be addressed. These include:

- Donors and government subsidies “crowding-out” private initiatives in value chain development
- Poor organisation among chain actors, particularly producers
- Risks inherent in value chains development (production risks, market risks and price risks)
- Limited knowledge and capacity among formal finance providers to effectively serve value chain actors (knowledge about relationships between chain actors, tools for value chain analysis, capacity to develop appropriate products for value chain actors, capacity to assess credit risks and business plans related to value chains, and capacity to follow-up of loans distributed to chain actors)
- Difficulties in enforcing contracts in the Rwandan context.

With respect to the Rwandan experience in providing formal finance through value chains, a number of lessons emerge. We learn for example that effective access to formal finance by chain actors requires improved synergies between chain support services (finance, capacity building and marketing services) providers. In addition, the necessity to complement financial services approach by the value chain approach to ensure effective access to finance by chain actors stands out.
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Nsabimana, Elie (Forthcoming) Value Chain Financing Approach: CAF Isonga case study.

ANNEX 1:

Figure 4: Rwanda coffee sector mapping

Source: Habyalimana
Figure 5: Households reporting any debt or savings by quintile (%)


Table 3: Purpose of loan or credit (% of loans)

<table>
<thead>
<tr>
<th>Use of the loan</th>
<th>EICV 1</th>
<th>EICV 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consumer goods</td>
<td>43.1</td>
<td>37.7</td>
</tr>
<tr>
<td>Agriculture</td>
<td>13.2</td>
<td>13.9</td>
</tr>
<tr>
<td>Other</td>
<td>14.3</td>
<td>11.9</td>
</tr>
<tr>
<td>Health</td>
<td>14.3</td>
<td>10.8</td>
</tr>
<tr>
<td>Business</td>
<td>4.5</td>
<td>10.0</td>
</tr>
<tr>
<td>Home</td>
<td>4.1</td>
<td>6.2</td>
</tr>
<tr>
<td>Education</td>
<td>2.8</td>
<td>5.9</td>
</tr>
<tr>
<td>Ceremonies</td>
<td>3.6</td>
<td>3.6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100.0</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

Table 4: Formal loans as a percentage of all credit (%)

<table>
<thead>
<tr>
<th></th>
<th>Formal</th>
<th>Informal</th>
</tr>
</thead>
<tbody>
<tr>
<td>City of Kigali</td>
<td>48.6</td>
<td>51.4</td>
</tr>
<tr>
<td>Other urban</td>
<td>38.4</td>
<td>61.6</td>
</tr>
<tr>
<td>Rural</td>
<td>25.2</td>
<td>74.8</td>
</tr>
<tr>
<td>Total</td>
<td>27.2</td>
<td>72.8</td>
</tr>
</tbody>
</table>

Poverty Status

<table>
<thead>
<tr>
<th></th>
<th>Formal</th>
<th>Informal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poor</td>
<td>21.6</td>
<td>78.4</td>
</tr>
<tr>
<td>Non poor</td>
<td>33.7</td>
<td>66.3</td>
</tr>
<tr>
<td>Total</td>
<td><strong>27.2</strong></td>
<td><strong>72.8</strong></td>
</tr>
</tbody>
</table>

ANNEX 2

The interviews were conducted with value chain actors to identify the range of factors considered to be major hindrances to smooth access to finance:

- **Large volumes of money injected in value chain development by the government and donors on a non-commercial basis.** The market is therefore distorted, as commercial credit cannot compete with grants and subsidies. Some examples of such practices include pesticides advanced to producer groups by OCIR-Café, which were rarely repaid. In 1998, the European Union provided 2,000 free tons of chemical fertilizers to farmers (Chemonics International Inc., 2006). Between 2001 and 2003, ACDI-VOCA, an American non-governmental organization, provided approximately US$600,000 financial assistance to nine coffee producers’ cooperatives\(^\text{18}\). In 2005, Chemonics International Inc. provided direct assistance to 16 washing stations, including a US$300,000 “matching” grant. BRD manages a credit line for support to rural sector, in which a borrower repays only 60 percent of loan received at a 13 percent annual interest rate, well under the market rate (18 percent). In practice, such “soft” money has a “crowding out” effect on private finance provision.

- **Producers are often not organized.** In these circumstances, exploiting far flung small plots limits producers bargaining power. In Rwanda, only 8 percent of coffee producers are grouped into associations or cooperatives (Lobry and Nkurikiyinka, 2005). Well organized associations and cooperatives are crucial for bulking production and lowering marketing costs. Formal finance providers hesitate to contract with unstructured producers associations, which display poor financial management and operating systems.

- **Fluctuating prices of commodities.** Most of supply chain commodities in Rwanda see their prices set by markets mechanisms. Uncertainty about producers’ revenues makes them an improbable niche for formal finance providers. High losses during the 2001 campaign prompted banks to stop financing coffee middlemen, and shifted their interest to more financially solvent exporters (Ibid.). However, good quality commodities tend to have very high and stable prices. This can be illustrated by Specialty Coffee in Rwanda\(^\text{19}\), where producers entered into long term relationships with expatriate buyers\(^\text{20}\) from America and Europe, fetching prices more than three times the average of prices quoted on the New York Commodity Exchange (Ibid.).

- **Crop diseases.** The risk in rural value chain products increases with unreliable production caused by crop diseases. For example, losses attributed to fungal damage, particularly Leaf Rust, are estimated to be as high as 40 percent in Rwandan coffee value chain (Ibid.).

- **Lack of viable markets for production.** Urunana Microfinance SA hesitated to provide credit to beekeepers in Kirehe, as they could not provide evidence of reliable market for their products (honey and beeswax). An insignificant US$ 8,000 credit to beekeepers’ cooperative was sourced by the institution in 2006, backed by a purchase agreement between the cooperative and Murenzi Supplies Company (Habyalimana, forthcoming).

- **Limited knowledge about value chains and value chain actors among financial services providers.** Very little has been written on value chains in Rwanda. Their potential remains unexplored, as formal finance providers systematically assert that they have limited acquaintance with value chain analysis tools, and limited time and resources to carry out such analyses.

- **Over-indebtedness in rural Rwanda.** People face considerable pressures (sickness, consumption smoothing, school fees and ceremonies) and they usually borrow from more than one source. Such a situation increases credit risks.

- **Lack of internal capacity to assess loan applications and business plans.** Banks and microfinance institutions have limited capacity (in terms of expertise and tools) to predict production in rural areas, and value addition at different links of the chains.

- **Challenge to ensure that credit is used for production, and not for consumption.** Allocating a portion of credit to consumption smoothing reduces chances for a successful investment and production projects for which credit is sought.

- **Side-selling.** It is practically impossible to lend to farmers’ associations and cooperatives on the basis of expected production, as members may receive a credit guaranteed by the cooperatives and the associations under the condition of selling their production to them (the cooperatives and

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\(^{18}\) The nine cooperatives are: UPROCA, ABAHUZAMUGAMBI, COOPAC, UCAR, ABURWAGASABO, IAKAKA, COCAGI, DUKUNDE KAWA and NIKOFA.

\(^{19}\) Specialty coffee is defined as the one which receives grades higher that 80 out 100 during cupping evaluations by expert cuppers. It is sold in specific and traceable lot. Processing methods have no bearing on the definition of specialty coffee.

\(^{20}\) Buyers such as Community Coffee in USA, Union Roasters in UK, Jobin in France and Schluter in Switzerland, among others, developed longer term ties with local exporters.
associations). However, the situation whereby members prefer to sell to other actors is very common and makes this scheme hardly workable.

- **Poor quality production.** Poorly handled and processed production limits farmers’ access to credit, as access to markets and premium prices are directly related to quality. For example, beekeepers in Kirehe were unable to sell their honey production due to “smoke” harvesting technique (Habyalimana, forthcoming). This resulted in a limited access to credit from Urunana Microfinance, as seen supra.