

Enhancing Access to Finance

for Technology Entrepreneurs in East Africa: Gaps Analysis
in Rwanda, Tanzania, Uganda, and Ethiopia



 **infoDev**
Growing Innovation



THE WORLD BANK

MAY 2014

Enhancing Access to Finance

for Technology Entrepreneurs
in East Africa: Gaps Analysis
in Rwanda, Tanzania, Uganda,
and Ethiopia



THE WORLD BANK



MINISTRY FOR FOREIGN
AFFAIRS OF FINLAND

© 2014 International Bank for Reconstruction and Development / The World Bank
Mailing Address: MSN I9-900 1818 H St. NW, Washington D.C., 20433 USA
Telephone: (+1) 202- 458-4070
Website: www.infodev.org
Email: info@infodev.org
Twitter: @infoDev
Facebook: /infoDevWBG

Some rights reserved.

This work is a product of the staff of *infoDev* / World Bank. Note that the World Bank does not necessarily own each component of the content included in the work. The World Bank therefore does not warrant that the use of the content contained in the work will not infringe on the rights of third parties. The risk of claims resulting from such infringement rests solely with you. The findings, interpretations, and conclusions expressed in this work do not necessarily reflect the views of the donors of *infoDev*, The World Bank, its Board of Executive Directors, or the governments they represent. The World Bank does not guarantee the accuracy of the data included in this work. The boundaries, colors, denominations, and other information shown on any map in this work do not imply any judgment on the part of The World Bank concerning the legal status of any territory or the endorsement or acceptance of such boundaries. Nothing herein shall constitute or be considered to be a limitation upon or waiver of the privileges and immunities of The World Bank, all of which are specifically reserved.

Rights and Permissions

This work is available under the Creative Commons Attribution 3.0 Unported license (CC BY 3.0) <http://creativecommons.org/licenses/by/3.0>. Under the Creative Commons Attribution license, you are free to copy, distribute, transmit, and adapt this work, including for commercial purposes, under the following conditions:

Attribution—Please cite the work as follows: Enhancing Access to Finance for Technology Entrepreneurs in East Africa: Gaps Analysis in Rwanda, Tanzania, Uganda, and Ethiopia—World Bank. License: Creative Commons Attribution CC BY 3.0

Translations—If you create a translation of this work, please add the following disclaimer along with the attribution: This translation was not created by The World Bank and should not be considered an official World Bank translation. The World Bank shall not be liable for any content or error in this translation.

All queries on rights and licenses should be addressed to *infoDev*, The World Bank, MSN: I9-900, 1818 H Street NW, Washington, DC 20433, USA ; email: info@infodev.org

About *infoDev*

infoDev, a global trust fund program in the World Bank Group, supports growth-oriented entrepreneurs through creative and path-breaking venture enablers. It assists entrepreneurs to secure appropriate early-stage financing; convening entrepreneurs, investors, policymakers, mentors and other stakeholders for dialogue and action. We also produce cutting-edge knowledge products, closely linked to our work on the ground.

This report was made possible thanks to the support of the Government of Finland.

The study was executed by Economisti Associati and commissioned by *infoDev* / World Bank.

For more information, please visit www.infodev.org

Table of Contents

Main Abbreviations and Acronyms.....	v
Executive Summary.....	vi
Main Text	
1. Introduction.....	2
2. Financing of Innovative Firms: Supply Side.....	6
3. Financing of Innovative Firms: Demand Side.....	22
4. Conclusions and Recommendations.....	34
Annexes	
Annex A: List of Persons and Entities Interviewed.....	40
Annex B: Basic Features of Investment Funds.....	46
Annex C: Profiles of Selected Investment Funds.....	50
Annex D: Basic Features of Banks Analyzed.....	66
Annex E: Profiles of Selected Innovative Firms.....	68
Annex F: Review of Legal Aspects in Ethiopia.....	76
Appendix: Investment Areas Open to Foreign Investors.....	80

Main Abbreviations and Acronyms

AECF	Africa Enterprise Challenge Fund
AfDB	African Development Bank
AGF	African Guarantee Fund for SME
BA	business angel
CB	capacity building
CFP	crowdfunding platform
CGS	credit guarantee scheme
DFI	development finance institution
ICT	information and communication technology
IFC	International Finance Corporation
IFI	international financial institution
ITES	information technology-enabled services
M&E	monitoring and evaluation
MSME	micro, small, and medium enterprises
R&D	research and development
SME	small and medium enterprises
TA	technical assistance
TOR	Terms of Reference
VC	venture capital

Exchange Rates

(currency units per one US\$, end of year)

	2011	2012
Ethiopian birr (ETB)	17.35	18.18
Rwandan franc (RWF)	604	631
Tanzanian shilling (TZS)	1,582	1,579
Ugandan shilling (UGX)	2493	2680

All dollar amounts are U.S. dollars unless otherwise stated.

Symbols Used in Exhibits

~ means approximate value

.. means not available

– means not applicable

0 means zero or a quantity less than half than the unit shown

In all tables, totals may not add due to rounding.

Executive Summary

Introduction

Access to finance is generally recognized as a major impediment to the development of micro, small, and medium enterprises (MSME) in the East Africa region. The task of the assignment was to identify, quantify, and qualify the financing gap facing high-growth entrepreneurs in East Africa, with special attention paid primarily to entrepreneurs active in (i) **information and communication technologies (ICT)**, including IT-enabled services; (ii) **climate technology**; and (iii) **innovative agribusiness activities**, as they are the three innovative sectors where the problem of accessing finance is particularly acute. The Study involves the analysis of elements underlying the **seed and early stage financing** gap in four countries: **Ethiopia, Rwanda, Tanzania, and Uganda**.

The Supply Side

Investment Funds. There are 19 funds currently operating (or about to start operating) in at least one of the four countries covered by the Study and whose target investments at least partly coincide with the \$50,000–\$1 million range. About half of these funds are regional in scope, with the remainder almost equally split between those pursuing country-specific and global operations. The majority of them have a squarely commercial orientation, though noticeably as many as a third of them are impact funds. About three-quarters of the funds reviewed are sectorally agnostic; only four have a clear sector focus. While being the specific focus of only a handful of the funds analyzed, the three sectors considered still attract a non-negligible share of investments of about half of the generalist funds considered. In terms of deal size, many funds generally engage in large transactions (that is, \$500,000 and above). As

concerns the financing instruments used, many funds make investments that do not involve, or only partly involve equity. Many of them use debt and/or hybrid financial instruments, combining features of both debt and equity financing. The type of instruments used appears to correlate to investment size. Thus, classical equity tends to be at play in larger deals; vice versa, smaller deals are realized through debt/hybrid instruments.

Informal Sources of Risk Capital. Risk capital may be available in the form of angel investment and crowdfunding. In recent years, angel investment has become increasingly popular in East Africa. However, the available evidence suggests that, with the partial exception of Kenya, angel investment in the three sectors considered is still in its very early stages, with some more positive signs being shown in Uganda and Tanzania, where angel networks are becoming a little more formalized, with the two other countries still lagging behind. For its part, although crowdfunding is becoming increasingly popular in East Africa, its uses seem to be almost exclusively limited to philanthropic activities, with the commercial use of crowd investment remaining largely unexplored—only a handful of local business ventures have received funding through some U.S. and European crowdfunding platforms. Concomitantly, opinions on the very possibility and appropriateness of using crowdfunding as an investment strategy are fragmented.

Debt Financing. Despite difficulties, bank lending remains the main source of external funding available to MSME. The present analysis is informed by the assessment of a diverse set of 12 banks. Based on both primary and secondary sources, it appears that banks are interested in MSME lending: while still constrained by a series of obstacles, SME loan portfolios are nonetheless growing across the board. On average, MSME account for anywhere between 35 and 50 percent of the total loan portfolio, with higher values in Uganda and Rwanda and lower values in Tanzania and Ethiopia. Several banks have been setting up ad hoc SME units to come to terms with lending

needs of this client stratum. Obstacles to lending concern the poor quality of business proposals, the informality of clients, and the lack of quality collateral. However partial, an increasingly popular solution to collateral shortage is offered by credit guarantee schemes; these are typically provided through various government and donor/IFI schemes, to ease access to bank loans. The above notwithstanding, due to their uncertain nature and associated risk profile, innovative MSME invariably raise more skepticism than traditional businesses.

Grant Schemes. Commercial sources of finance are complemented by a variety of grant (or quasi-grant) schemes established by government authorities or donors. Most of the schemes are of a general nature, while some others have dedicated windows with bearing on the businesses hereby considered. One notable example is the Africa Enterprise Challenge Fund (AECF), a matching grant facility promoting pro-poor growth by providing support to **innovative initiatives in the agribusiness and climate technology sectors**. Started in 2008, as of late September 2012 it had completed 14 investment competitions and approved **a total of 133 projects in 22 countries (including Tanzania, Uganda and Rwanda), with total financing in the order of \$100 million**. Several other grant or quasi-grant schemes exist in almost all four countries considered. While not on par with the larger AECF, these schemes promise to help meet the needs of a number of innovative entrepreneurs.

The Demand Side

ICT. The information and communication technology (ICT) sector is divided into four segments, namely **telecoms, hardware, software and information technology-enabled services (ITES)**. All in all, at the regional level, the ICT sector can be grossly estimated to comprise between 2,500 and 3,500 businesses. The majority of operations consist of micro and small businesses, and opportunities concentrate in the

software and ITES segments. Within ITES, the business process outsourcing (BPO) subsector is rapidly expanding, with domestic players starting to extend their services across borders and international companies striving to gain an East African foothold. Conversely, the **telecom** segment is still reserved to a modest number of large operators, while the **hardware** segment is mostly populated by distributors, resellers, and dealers of imported products; local manufacturing of ICT equipment is nearly inexistent. The financing needs voiced by software ventures can be grouped into two ranges depending upon the business stage of development. On one hand, seed stage ventures need between \$5,000 and \$10,000 to cover expenses for the conception and testing of the business ideas. On the other hand, comparatively more established enterprises usually seek between \$20,000 and \$100,000 to support increasing working capital requirements, research and development (R&D), and product development. In the case of call centers/BPO services, financing needs are significant, going from \$100,000 to \$200,000 to scale up small operations, up to more than \$500,000 for the setup of brand-new, medium-size initiatives.

Agribusiness. For the purpose of the Study, the focus will be placed on two segments of the agribusiness value chain, constituted respectively by (i) agro-dealers, selling and distributing agro-inputs, such as seeds and fertilizers, but also farm equipment, and (ii) agro-processors, as well as on (iii) some agribusiness support industries and services. Innovation in the agribusiness is understood as involving some type of technological innovation and/or the adoption of innovative business models. Accordingly, any business in the agro-dealing and support industries promises to bear innovation potential. However, currently these two segments host only a limited number of projects of interest, possibly around a dozen per country. Conversely, the **agro-processing** segment is highly fragmented, with a plethora of small operators populating especially Ethiopia and Tanzania, but with a much lower innovation

potential. Given the diverse set of businesses embraced by the innovative agribusiness sector, amounts sought by the companies vary significantly, going from as low as \$20,000 to scale up operations of small processors to \$1 million growth capital to fund major expansions (equipment purchases, setting up new facilities, sales and marketing initiatives) of medium-size operators.

Climate Technology. Four segments of this sector are analyzed: (i) mini-grid power systems, (ii) off-grid stand-alone systems and equipment, (iii) energy-efficient technologies, and (iv) biogas technologies. Although the number of formally established operators in the region is hard to quantify with any accuracy, each of these segments appears to be scarcely populated. The financing needs voiced by climate technology enterprises reflect the diverse nature of the sector, which encompasses different technologies, energy sources, and applications. The amounts sought by companies vary accordingly, ranging from less than \$50,000 for setting up a pico-hydropower scheme to the \$100,000–\$300,000 range to create or expand medium-scale operations of both off-grid electricity and energy-efficient technologies providers. More sizable amounts are required for the construction of pilot biogas facilities, above \$700,000. Other large operations—\$500,000 and above—with a distinctive social orientation usually enjoy a better standing in relation to banking institutions and can often count on the contribution of government and donor schemes either in the founding or throughout the implementation phase.

Conclusions and Recommendations

The Study confirms the existence of a significant financing gap for innovative MSME active in the target sectors, but the range of financial transactions for which problems are experienced appears to be narrower than initially envisaged—that is, in the \$20,000–\$500,000 range. From a sectoral point of view, the financing gap is comparatively more severe in the ICT sector, given that the amounts sought by innovative ICT firms are typically too small to constitute an attractive proposition for providers of risk capital and that the sector is still regarded as too risky or is poorly understood by most banks. In agribusiness, the

problem seems to be comparatively less acute, thanks to the increasing volume of resources targeting the financing of agribusiness initiatives and due to the fact that the overall number of deserving enterprises is smaller than perceived. Likewise, in the climate technology sector, increased attention paid by commercial investors and donors/international finance institutions (IFIs) have boosted the overall volume of funding potentially available. Nevertheless, a financing gap persists.

At the country level, Ethiopia is the country with the most severe financing gap, given the limited presence of investment funds and bank lending to SME constrained by problems in the mobilization of resources as well as the restrictive government policy. The situation is more favorable in Uganda and Tanzania, where the activities of investment funds are on the rise and banks are also increasingly targeting the MSME market, with significant support from IFI/donor credit lines and/or credit guarantee schemes (CGSs). Commercial sources of finance are complemented by several grant and soft lending schemes, which play an important role, especially in agribusiness and renewable energy. Rwanda is an intermediate situation: the country is increasingly attracting the attention of investment funds active at the regional level, although in-country providers are few and far between. In the banking sector, lending volumes are expected to rise, partly thanks to the activism of the recently established Business Development Fund (BDF) credit guarantee schemes, but significant efforts will be required to achieve levels on par with Tanzania and Uganda.

A number of measures can be envisaged to address the financing gap issue. Four sets of possible *infoDev* interventions have been preliminarily identified, to be further elaborated upon on the basis of the feedback provided by the Client regarding the preferred options. The four options can be grouped according to their specific objective. The first two are aimed at raising the availability of risk capital in the region while the latter two at fostering SME bank lending by increasing banker's risk tolerance:

- **Option 1. Setting Up a New Early Stage Investment Fund**, specifically targeted at providing early stage funding (seed and start-up) at innovative enterprises seeking between \$20,000 and \$50,000 in the target sectors

- **Option 2. Cooperating with Existing Investment Funds**, which may take various forms, including (i) investment in existing seed funds and/or in funds especially focused on the target sectors, or (ii) creation of special *infoDev*-financed/sponsored windows within funds that have a more general orientation
- **Option 3. Setting Up Special Credit Guarantee Mechanisms**, either involving the creation of special windows within existing generalist CGSs or setting up small credit guarantee facilities directly managed by business incubators, which would act as guarantors for loans extended to their incubatees
- **Option 4. Setting Up a Grant and Guarantee Scheme**, a “hybrid” intervention, combining the setup of a credit guarantee mechanism with the allocation of grant funding to innovative enterprises selected through some type of competitive process

1 Introduction

This Draft Final Report (the “Report”) is the third deliverable submitted by *Economisti Associati* (the “Consultant”) to the World Bank Group—Information for Development Program (the “*infoDev* program” or the “Client”) in the framework of the study on “**Enhancing Access to Finance for Technology Entrepreneurs in East Africa: Gaps Analysis in Rwanda, Tanzania, Uganda, and Ethiopia**” (hereafter referred to as the “Assignment” or the “Study”).¹

The Report presents the findings resulting from the desk and fieldwork carried out under the Assignment and formulates an initial set of recommendations for possible, future *infoDev* actions. In line with its draft nature, some parts are still preliminary and may be subject to further elaboration in the preparation of the Final Report, taking into account the feedback provided by the Client.

1.1 Nature of the Assignment

Background. The Assignment is part of *infoDev’s longstanding efforts to promote the development of innovative firms in the East Africa region.* In particular, in the framework of the *Creating Sustainable Businesses in the Knowledge Economy* program, *infoDev’s* work has already resulted in the provision of support to various business incubation initiatives (in Kenya, Tanzania, and Uganda), the carrying out of studies, and the organization of conferences (the Open Innovation Africa Summits). Under the parallel *Climate Technology* program, *infoDev* is currently

implementing Climate Innovation Centers (CICs) in Kenya and Ethiopia.

Access to finance is generally recognized as a major impediment to the development of micro, small, and medium enterprises (MSME). The problem is particularly severe for innovative firms, due to a combination of factors, including the lack of tangible assets that can be leveraged as collateral, the marked informational asymmetries between promoters and potential financiers, and the high risk of failure inherent in any innovative activity. Earlier studies have shown that difficulties in accessing funds (the so-called financing gap) are particularly severe for amounts up to \$1 million, as transaction costs are excessively high compared with the returns achievable with small deals.

Objective. Taking into account the above, *infoDev* is currently exploring the possibility of setting up “*a small East Africa fund to provide capital to high-growth entrepreneurs,*”² with special reference to entrepreneurs who are clients of *infoDev*-supported incubation centers in the region. Therefore, **the objective of the Study is to provide elements useful for the design of such a fund.** In turn this calls for (i) a detailed analysis of the existing financing gap, and (ii) the formulation of practical recommendations on how the proposed fund could be structured.

1.2 Scope of Work

The Study involved the analysis of elements underlying the financing gap in four countries: **Ethiopia, Rwanda, Tanzania, and Uganda.** The other elements defining the scope of work indicated in the Terms of Reference (TOR) can be summarized as follows:

- The Study focuses on “**high-growth potential innovative companies,**” the so-called “gazelles,” that is, small enterprises that have

¹ Earlier deliverables include the *Inception Report*, submitted on September 30, 2012, and a *Memo on Preliminary Findings and Operational Recommendations*, submitted on October 15, 2012.

² Unless otherwise indicated, all italicized quotations in this Section are from the Terms of Reference.

a chance of becoming medium-size businesses in a relatively short period of time. The Study is not concerned with “lifestyle businesses,” characterized by a lower propensity for fast growth, and with “accidental entrepreneurs,” whose existence is simply the result of a lack of jobs.

- In line with the above, the attention is focused on **seed and early stage financing**, encompassing financial transactions in the \$50,000–\$1 million range. The Study does not cover microfinance schemes targeted at accidental entrepreneurs or classical corporate finance or private equity operations, who cater to the needs of already well-established enterprises.
- The Study focuses primarily on firms active in three broad areas of activity (hereafter referred to as “sectors”: (i) **information and communication technologies** (ICT), including IT-enabled services (ITES); (ii) **climate technology**; and (iii) **innovative agribusiness activities**. While activities characterized by “technological” innovation are an obvious target of the analysis, the Study also considered other types of innovation—for example, the adoption of innovative business processes or models.

According to the TOR, the Study was **intended to focus primarily on the “supply side” of the financing market** because, thanks to earlier analytical work and, especially, *infoDev*’s experience with business incubation in the region, “the demand side is relatively known.” However, in subsequent interactions with the Client, **the need to expand the analysis of the “demand side” also emerged**.³ This led to a rebalancing of the focus, with greater attention than initially envisaged devoted to the analysis of the financing needs voiced by innovative firms active in the sectors of interest (see below).

³ See, in particular, the e-mail message from Ravi Gupta dated October 22, 2012.

1.3 Methodological Approach

The Study involved a combination of desk work, aimed at reviewing and consolidating the information available in secondary sources, and fieldwork, aimed at collecting factual information and eliciting views from relevant stakeholders.

Desk Work. Desk work was concentrated in the early stages of the Assignment and involved the review of a variety of secondary sources, including (i) studies on the **structure and evolution of the financial sector** in the four countries analyzed (for example, the financial sector profiles produced by the Making Finance Work for Africa initiative); (ii) **earlier infoDev studies** on innovation financing/innovative MSME as well as documents related to **specific infoDev interventions** (for example, the feasibility studies for the Kenyan and Ethiopian CIC); (iii) **general studies on the three sectors** relevant for the analysis (for example, the seminal World Bank study on agribusiness and innovation in Africa) as well as related **policy documents** (for example, the ICT strategies adopted by various governments); (iv) studies and surveys on the **financing of MSME/innovative firms** in East Africa (for example, the recent Deloitte/Africa Assets survey of private equity in East Africa); (v) evaluations and operational documents on **specific financial instruments** (for example, the evaluations of USAID credit guarantee schemes); (vi) websites and presentation materials of **selected financial organizations** (investment funds, commercial banks, and so on) and of initiatives promoted by **donors and international financial institutions** (IFI); and (vii) **statistical sources** of information on financial sector development, access to finance, and other relevant themes (for example, the IMF’s Financial Access Survey). The analysis of these sources allowed to gain a good grasp of the overall situation in the financing of MSME/innovative enterprises and to identify the entities to be interviewed and the key issues to be analyzed during subsequent fact-finding work during country missions.

Fieldwork. Fieldwork involved missions to the four countries analyzed, each mission having a

duration of about one week. Missions were partly facilitated by some of the *infoDev* counterparts in the various countries and involved interviews with a wide range of entities, including (i) managers of **incubators/accelerators**; (ii) **financial operators** (investment funds, commercial banks, and so on) involved in the financing of innovative ventures; (iii) **innovative enterprises** active in the three target sectors; (iv) **government bodies** involved in the promotion of innovation, technology development, entrepreneurship, and so on; and (v) representatives of the **World Bank Group** and/or of **IFI/donor initiatives**. The TOR called for an average of about 20 interviews per country visited, with a special emphasis on investment funds and other financial intermediaries. However, the number of interviews was increased to accommodate the request for a greater emphasis on the “demand side,” while the selection of interviewees was adapted to reflect country-specific features (for example, there are few investment funds in operation in Ethiopia; therefore, more emphasis was placed on interviews with banks). All in all, fieldwork involved **about 110 interviews**, with an average of 27 interviews per country.⁴

1.4 Structure of the Report

The Report is structured as follows:

- Section 2 focuses on the **supply side**, with the review of investment funds and other financing schemes and mechanisms potentially available to innovative firms.

⁴ The full list of persons and entities met during fieldwork is provided in annex A.

- Section 3 concentrates on the **demand side**, with the analysis of the financing needs voiced by firms active in the three target sectors.
- Section 4 provides an assessment of the nature and severity of the **financing gap** and presents some **recommendations** for possible, future *infoDev* initiatives.

The Report also includes six annexes:

- Annex A, with the list of **persons and entities interviewed**
- Annex B, with basic information on the **investment funds analyzed**
- Annex C, with the detailed profiles of **selected investment funds**
- Annex D, with basic information on the **banks analyzed**
- Annex E, with the profiles of **selected innovative firms**
- Annex F, with a summary analysis of legal issues concerning **investment funds’ operations in Ethiopia**

Finally, an appendix lists the investment areas open to foreign investors.

2 Financing of Innovative Firms: Supply Side

2.1 Introduction

This section analyzes the sources of funding that are potentially available to innovative MSME in Tanzania, Uganda, Ethiopia, and Rwanda as well as the obstacles that prevent access to funding. Section 2.2 provides an overview of the financial sector in the four countries analyzed. Section 2.3 reviews in detail the operations of investment funds, providing equity financing as well as other forms of risk capital. Section 2.4 reviews the sources of informal risk capital, namely business angels and crowdfunding. Section 2.5 deals with bank lending as well as with the closely related theme of credit guarantees. Finally, section 2.6 reviews some grant and quasi-grant financing schemes.

2.2 Regional Overview⁵

The financial sectors of the four countries analyzed in this Study share a number of common features, but they also display significant differences. On one hand, the overall **level of development remains fairly modest** compared with that of more advanced African economies and, in particular, with respect to neighboring Kenya. Classical financial “depth” indicators (for example, ratio of deposits or loans to gross

⁵ The information presented in this section originates from several sources. Information on the structure of national financial systems was derived from the most recent International Monetary Fund (IMF) country reports as well as from other financial sector studies, typically accessed through the Making Finance Work for Africa portal (<http://www.mfw4a.org/>). Data on bank lending are from the IMF’s Financial Access Survey data set (<http://fas.imf.org/Home.aspx>); those on capital markets are from the African Securities Exchanges Association (<http://www.africansea.org/asea/>). More qualitative elements were collected during interviews and through the analysis of annual reports and other documents of specific financial institutions.

domestic product, or GDP) indicate a limited level of financial intermediation and the same applies to financial “breadth” indicators (for example, number of branches per population), with a large share of the population still without access to financial services. Capital markets are extremely thin (or inexistent) and a private equity industry has just begun to emerge, with an overall limited number of deals per year. On the other hand, the four countries have followed **significantly different development trajectories**. Thanks to a series of structural reforms implemented since the 1990s, the Ugandan and Tanzanian financial sectors have shown some signs of dynamism, with an increase in the number of players, the introduction of new financial products, and, lately, an increase in the volume of activity. In contrast, Ethiopia’s financial sector, still largely under the control of the state, has been developing at a much slower pace. Rwanda is somewhat in between, with the state still playing an important role, although overall the regulatory framework is fairly liberal.

Tanzania. In Tanzania, the reform of the financial sector started in the early 1990s, with the progressive privatization of a number of state-owned organizations and the arrival of some international players. At present, the **banking sector** includes some 30 commercial banks, with foreign-owned or participated banks playing a leading role (about 50 percent of assets). The government still retains minority participations in two leading commercial banks and owns the national development bank, *Tanzania Investment Bank*. Lending volumes have been increasing in recent years, reaching a level of about 21 percent of GDP in 2011. The distinction between regular banking and **microfinance** is somewhat blurred, due to the strong presence of “microfinance banks” (*National Microfinance Bank, Advans Bank, Akiba*, and so on), targeting the lower end of the credit market. The development of leasing schemes has been actively promoted by the International Finance Corporation (IFC) since the mid-2000s, as part of the Africa Leasing Facility initiative. Volumes are still limited, but leasing products are now being offered by several banks

and specialized operators (for example, *Alios*, a leading pan-African financial group). The **capital market** is still largely undeveloped: with only 17 companies listed, in 2011 the value of trading was a negligible \$33 million (less than 1 percent of the corresponding value in the Nairobi Stock Exchange). In the area of **private equity**, Tanzania was a precursor in the region, with a couple of IFI/donor-supported funds established in the mid- to late 1990s (*Tanzania Venture Capital Fund* and *Fedha Fund*). At present, there appear to be no investment funds headquartered in Tanzania, but since the late 2000s the country has become an important area of operations for some regional players (*GroFin*'s portfolio includes some 50 investments).

Uganda. In Uganda, the **banking sector** underwent significant changes in the late 1990s and early 2000s, with the privatization of leading state-owned banks and the consolidation of smaller operations. The sector is dominated by foreign banks, with South Africa's *Stanbic* playing the leading role, followed by *Stanchart* and *Barclay's*, both owned by U.K. groups. The government has completely disengaged from commercial banking and at present only controls the *Uganda Development Bank*, whose level of activity is fairly limited. The volume of credit has been expanding at a fast pace over the last few years, moving from 9 percent of GDP in 2005 to 20 percent in 2011, a level comparable to that of Tanzania. The presence of international banks has favored the emergence of innovative financial products: leasing was introduced in the late 1990s and is comparatively more used than in other countries. As in Tanzania, there is some overlapping between commercial banking and **microfinance**, and one microfinance bank (*Centenary Bank*, controlled by the Catholic Church) is the main provider of microloans. In the area of **private equity**, the first initiative was a facility set up in the late 1990s with USAID funding and managed by the *Development Finance Company of Uganda* (DFCU). Uganda is currently home to a couple of medium-size investment funds focusing on agribusiness and operating at the regional level, plus some smaller operations focusing on seed and early stage financing. Capital

market activities are negligible: with only 14 companies listed as of 2011, the Uganda Securities Exchange's turnover was a mere \$16 million.

Ethiopia. Ethiopia's financial sector is still largely dominated by the government and financial activities are largely reserved to Ethiopian nationals only. The **banking sector** includes some 20 commercial banks in operation, but the state-owned *Commercial Bank of Ethiopia* (CBE) remains the dominant player, accounting for more than 50 percent of assets. Private banks' operations have been expanding over time, but overall credit policy has not been sufficiently conducive. As a result, the share of total lending to GDP declined between 2005 and 2010 by four percentage points, and only in 2011 did it rebound to 16 percent, which is still lower than in Uganda and Tanzania. The range of products offered by banks is fairly narrow (classical overdrafts, advances, and bank loans), and leasing and factoring are still not used. The limited development of banking activities is partly offset by the presence of a strong **microfinance sector**, with the largest microfinance institutions effectively competing with some banks in terms of size. In Ethiopia, there is a well-established tradition of investors subscribing shares in public offerings, but there is no organized **capital market** and shares are traded informally. Private equity activities are at a very early stage: in recent years, there have been a few large-scale transactions, but at present there is only one investment fund with a stable presence in the country (with two more in fund-raising phase).

Rwanda. Rwanda's **banking sector** includes about 10 commercial banks plus some specialized lending institutions. The state still retains sizable participations and de facto controls together with public pension funds the two leading commercial banks (*Bank of Kigali* and *Banque Commerciale du Rwanda*) and the *Banque Rwandaise de Développement*, which plays an important role in some credit segments, namely agricultural lending. Financial sector modernization is actively pursued at various levels: in order to foster lending activities, the government recently set up a series

of credit guarantee facilities, and leasing was recently introduced with support from the IFC. However, this reformist zeal has so far achieved only limited results, as in 2011 the volume of bank lending still stood at a paltry 13 percent of GDP, the lowest level among the four countries analyzed. The **microfinance sector** is highly fragmented, consisting of some 500 savings and credit cooperatives, and its progressive consolidation into a smaller number of more efficient units, operating at the regional level, is envisaged. **Capital market** activities are minimal, with only four companies listed in the *Rwanda Stock Exchange* (of which two are cross-listed in other stock exchanges in the region). **Private equity** activities are also limited, although on the rise. Two investment funds were established in the last few years, and the country also attracted investments from funds operating on a regional or pan-African basis (for example, investments in three coffee companies by the Lagos-based *Kaizen Africa Special Situations Fund*).

2.3 Investment Funds

There are an estimated 50 to 60 investment funds currently operating in the East Africa region, plus some 10 funds in the fund-raising stage.⁶ However, the majority of these funds are not relevant for our analysis because they target deals that fall outside the financing range considered by the Study

⁶ A recent study on the private equity industry in East Africa identified 53 funds operating in the region at end 2011. See Deloitte—Africa Assets, “2011 East Africa Private Equity Confidence Survey: Promising 2012,” March 2012.

and/or they exclusively focus on Kenya. Therefore, the **analysis focuses on 19 funds** that are currently operating (or are expected to start operating in the near future) in at least one of the four countries covered by study and whose target investments at least partly coincide with the \$50,000–\$1,000,000 range. The funds meeting these criteria and hereby analyzed are listed in exhibit 2.1 below.⁷

Basic Features. About half the funds analyzed (eight) operate at the **regional level**, although sometimes they have a more or less marked inclination for some countries (for example, *Empact Growth Fund* is expected to focus primarily on Ethiopia, whereas *Savannah Fund* is focusing on Kenya and Tanzania). Five funds operate exclusively at the **country level** (two in Rwanda, two in Uganda, and one in Ethiopia); the remaining six funds pursue **global/pan-African operations**, although sometimes with a more or less strong preference for East African countries. This is the case, notably, of *GroFin Africa Fund* (GFAF), with a strong presence in Tanzania and Uganda, and of *LGT Venture Philanthropy* (LGT), whose only African office is located in Uganda. While virtually all the funds display a development element, with frequent reference to the expressions such as “impact investing” and “social impact,” the

⁷ The identification of these investment funds is the result of a fairly laborious process involving, in addition to interviews during fieldwork, the screening of a variety of sources (websites, information memorandums, articles published in the international media or in the East African press, and so on). The analysis was made particularly complex by the presence of a number of global funds that include in their mandate investment, at least in principle, activities in the region, but whose actual involvement in the four countries was difficult to ascertain.

EXHIBIT 2.1: Investment Funds Analyzed

- Acumen Fund
- African Agricultural Capital Fund
- Business Partners International Rwanda SME Fund
- *Damascus Capital Growth Fund*
- *Empact Growth Fund*
- eVentures Africa Fund
- Fanisi Venture Capital Fund
- Fusion African Access
- Grassroots Business Fund
- GroFin Africa Fund
- InReturn East Africa Fund
- LGT Venture Philanthropy
- Mango Fund
- Persistent Energy Partners
- *Rift Valley SME Fund 1*
- Savannah Fund
- Schulze Global Ethiopia Growth and Transformation Fund
- *TBL Mirror Fund 2*
- Thousand Hills Venture Fund

Note: The funds in italics are currently in the launch phase.

vast majority have a **predominantly commercial orientation**. A clear not-for-profit orientation is prevalent only in the case of global operations, namely LGT, *Grassroots Business Fund* (GBF), *Acumen Fund*, and *Persistent Energy Partners* (PEP). Declared **target rates of return** are in the 8–10 percent range for not-for-profit/impact operations (for example, *Mango Fund*), to 25 percent or above for more openly commercially oriented funds (for example, *Fusion*).

The vast majority of funds were **established in recent years**: 10 funds were set up in 2010–2012 and five more were established in 2007–2009. The oldest fund in operation is *Acumen Fund*, a global fund that was set up (and started operating in East Africa) as early as 2001. However, several funds are a follow-up of earlier operations that initiated in the mid- to late 2000s. For instance, GFAP is the successor of the *GroFin East Africa Fund*, set up in 2006, whereas the *African Agricultural Capital Fund* (AACF) is the successor of *Africa Agricultural Capital* (AAC), launched in 2005. In certain cases (for example, *Schulze Global Ethiopia Growth and Transformation Fund*, or SGE), the formal establishment of the fund was preceded by some investment activity done through other vehicles. Finally, PEP although formally established only in November 2012, is the result of the transformation of the *E+Co* fund, which was set up as early as 1994.

The size of funds ranges from as little as **\$1 million** (*Mango Fund*) **up to \$170 million** (GFAP, which also operates in other African regions). Leaving aside global funds, whose resources are obviously only partly allocated to East Africa, the majority of funds are in the \$25–\$60 million range, with a couple of cases around \$10 million (*Savannah* and *Business Partners Rwanda*) and a similar number with a capital of \$100 million or more (SGE, *Fusion*, and the already mentioned GFAP). It is worth noting that (i) many regional funds are also (often predominantly) active in Kenya, (ii) some funds are still in the fund-raising phase, and the expected closing value may or may not be reached, and (iii) the size of PEP is partly notional, as it refers to the funds under management by *E+Co*, which had to be restructured due to financial difficulties. Taking into account these factors, the total value of investable funds in the four countries can be grossly estimated at **anywhere between \$200 and \$350 million**, the variation being largely dependent upon SGE's ability to raise the full amount envisaged (\$100 million) and *Fusion's* inclination to invest outside Kenya. About half

of the funds are (or are expected to be) funded **exclusively or predominantly by private sources**, that is, institutional investors and/or private investors. These include some philanthropic investors (for example, the Princely Family of Liechtenstein, which provides funding for LGT), classical institutional investors (expected to account for the bulk of funds raised by *Fusion*), and individuals (with significant presence of diaspora investors in Ethiopia and of expatriate investors in Uganda and Tanzania). The other half of the funds analyzed see the prevalent participation of **IFIs** (with at least four funds participated by the IFC) **and/or bilateral development finance institutions (DFIs)** (Britain's CDC Group, the Netherlands Development Finance Company (FMO), and so on) **and/or of development-oriented private organizations** (Bill and Melinda Gates Foundation, Rockefeller Foundation, and so on). There is no linear relationship between fund size and sources of funding but, in general, IFIs/DFIs and foundations are a key source of funding for the largest funds and for some of the smallest ones, whereas private sources tend to predominate in medium-size funds.

Sector Orientation. About three-quarters of the funds reviewed can be characterized as **sectorally agnostic**; only four have a clear **sector focus** (two on ICT, one on agribusiness, and one on renewable energy). In generalist funds, sector preferences or priorities are often declared, but they are usually very broad (for example, fast-moving consumer goods). In IFI/DFI-participated funds, sector exclusions cover the usual "politically incorrect" lines of business (tobacco, gambling, and so on), while some other funds do not invest in activities regarded as too risky (for example, *Business Partners Rwanda* does not invest in primary agriculture, trade, and mining). Regarding the three target sectors:

- **ICT** is the sole focus of *Savannah Fund* and *eVentures Africa Fund* (eVAF) and is regarded as an interesting area of investment by GBF, *InReturn East Africa Fund* (IEAF) and *TBL Mirror Fund 2* (TBL).
- **Agribusiness** (although not necessarily of the "innovative" variety) is the sole focus of AACF and an important investment target for *Empact Growth Fund*, GBF and IEAF.
- **Climate technology-related activities**, and in particular renewable energy, is the only area of investment for PEP, but is also considered with great interest by *Acumen* and *Empact*.

Typology of Deals. While most of the funds analyzed make reference to the possibility of investing in early stage deals, in reality the vast majority display a clear inclination for growth financing. The only fund squarely targeting deals at the **seed and start-up stages** is *Savannah Fund*, which focuses on ICT (web and mobile technologies). Early stage financing used to be common for *E+Co* and is currently considered by *Mango*, *LGT*, and *Acumen*, and TBL declares being willing to invest in “late start-ups” (*sic*). All other funds are almost exclusively involved in **growth financing**, targeting deals with firms that have been in business for at least two to three years. In the larger funds, such as *SGE*, *Fusion*, *Fanisi*, and *Rift Valley*, **later stage deals**, associated with major company transformations, are also considered.

The inclination toward growth financing is reflected in the typical size of deals. Indeed, only half of the funds target investments that squarely fall within (or coincide with) the \$50,000–\$1 million range considered by the Study. The other funds target a much broader range of deals, with several funds showing a preference for larger investments (that is, above \$1 million) and only a couple also considering deals below \$50,000. Even more important, irrespective of the “intentions” declared in investment memoranda and information materials, available information on actual deals suggest that **in practice many funds tend to concentrate on larger deals**. This is the case, for example of *Acumen*, *AACF*, *eVAF*, and *IEAF*, whose average deal size appears to be in the order of \$1 million or above. The tendency to concentrate on larger deals can be observed also in not-for-profit operations: in *LGT*, the average deal size is about \$700,000, which, although still within the range considered, is obviously closer to the upper bound than to the lower one. Also, there are indications that the size of deals tends to increase over time. For instance, in *Acumen*, the average size of deals approved in 2011 was about \$400,000, compared with an average of some \$160,000 for the whole portfolio. Similarly, in the *AACF*, the average of recent deals is above \$1 million, whereas the average for the predecessor *AAC* was around \$650,000. Overall, it appears that only half a dozen funds are really systematically targeting deals worth less than \$500,000, and that only a couple actively consider deals worth less than \$200,000 (*Savannah* and *Mango*).

Although the notion of investment funds is traditionally associated with equity investments, many of the funds analyzed make use of **debt and/or hybrid financial instruments**, combining some features of debt and equity financing, such as shareholders loans, royalty loans, and participating loans. In particular, debt and/or hybrid financial instruments are relatively more common among the funds more oriented toward smaller and medium-size deals, whereas “classical” equity appears to be preferred by funds focusing on the upper part of the financing gap. But “cultural” factors are also at play. Debt and/or quasi-equity are the preferred instruments for operators with a more intimate knowledge of African MSME, such as *GroFin* and *Business Partners*, both South African companies and with a vast experience in the financing of businesses across various African countries. Instead, equity is the instrument of preference for funds with a U.S. and/or U.K. origin. The U.S. origin helps to explain why equity is the sole instrument considered by *Savannah* and *Thousand Hills*, despite their focus on relatively small deals. Finally, in the case of Ethiopia, the preference for equity is also the result of regulatory restrictions that make the use of debt or quasi-equity instruments potentially risky (see box 2.1).

Portfolio and Pipeline. While detailed information on the size and composition of portfolios is not available, overall the investment funds already in operation are estimated to have made **some 130–150 investments** in the four countries. About half of these investments have been made by *GroFin*, by far the most active player in the region. Some 20 investments have been made by PEP’s predecessor, *E+Co*; *Business Partners* has finalized nine deals. All other funds have made not more than five deals. Tanzania is the country with the largest number of investments, about half of the total, followed by Rwanda and Uganda. In Ethiopia, only five investments have been identified. As many funds were only recently established, **little can be said about portfolio performance**. Some funds have already been able to quickly exit some investments (for example, *GroFin* has already exited five deals in Tanzania), but there are also cases in which the portfolio seems to include several difficult cases (for example, those of PEP).

BOX 2.1: Choice of Instruments and Regulatory Regime

In **Ethiopia**, there is no specific regulatory framework for investment funds, and government authorities make reference more or less explicitly to the legislation on the banking sector. According to the *National Bank of Ethiopia* (NBE), the setting up of an investment fund is allowed and its operations are not subject to prudential supervision only to the extent that the fund does engage in one of the two key features that define the banking business, that is, deposit taking and lending. If a fund were to extend loans or make quasi-equity investments with instruments resembling loans (for example, the royalty loans used by *Business Partners*), the activity would be considered as an illegal engagement in the banking business. The problem would be more severe in foreign-funded and -managed investment funds as, according to existing legislation, all financial sector activities are reserved to Ethiopian nationals. Under these conditions, the managers of funds currently operational or in the launch phase (*Schulze and Empact*) set out to engage only in equity transactions.

A completely different situation is found in **Rwanda**, despite the fact that, in a similar vein to Ethiopia, this country does not have a specific legislation on investment funds and, therefore, reference is made to general regulations governing the banking business. However, the interpretation given to existing legislation by the *Banque Nationale du Rwanda* (BNR) is that it is deposit taking, rather than lending, the key distinctive feature of banking activities. Therefore, investment funds are subject only to a mild regulation (they have to submit monthly reports on their operations for information purposes) and there are no limitations on the use of quasi-equity instruments.

2.4 Informal Sources of Risk Capital

The expression informal risk capital refers to investments made by individuals who directly provide financing to firms with which they had no previous relationship. In the past, the notion of informal risk capital has de facto coincided with that of “**angel investment**.” In recent times, the development of the Internet has facilitated the emergence of a new form of informal investment targeting firms, the so-called **crowdfunding**.

Business angels (BAs) are an important source of financing for the start-up and initial growth phases of technology ventures. This is particularly the case in Western countries, where BAs have been playing an increasingly important role: in 2009, angel investment in North America and Europe was estimated to exceed \$25 billion, a value only marginally lower than the corresponding figure for venture capital funds.⁸ In the same year, 5 percent of the total new jobs in the United States were created in enterprises supported by BAs.⁹ Angel investment is progressively moving to developing

countries,¹⁰ but it is still fairly undeveloped in Africa, with the exception of South Africa.

The expression **crowdfunding** designates the collective participation of several individuals, each contributing small amounts, to the financing of certain initiatives, typically via the Internet. Crowdfunding campaigns may raise donations to pursue broad social goals (for example, the funding of a cultural initiative) or may be commercially motivated, with the raising of equity or debt financing for business ventures. Crowdfunding has gained substantial popularity in the last few years and a recent report on the crowdfunding industry identified some 450 crowdfunding platforms (CFPs) in activity in April 2012.¹¹ Together, these CFPs raised almost \$1.5 billion through more than one million campaigns in 2011. The vast majority of CFPs pursue philanthropic goals, but the number of commercially oriented initiatives is growing fast, increasingly attracting the attention of investors.

8 For a recent overview of angel investment activities in Western countries, see OECD, *Financing High-Growth Firms: The Role of Angel Investors* (Paris: OECD Publishing, 2011).

9 Jeffrey Sohl, “The Angel Investment Market in 2009” (Center for Venture Research, University of New Hampshire: 2010).

10 For a recent overview of angel investment in emerging countries, see W. Scheela and others, “Business Angel Investing in Emerging Economies: Policy Implications for Southeast Asia.” Paper submitted to the Kauffman Foundation’s International Research and Policy Roundtable, Liverpool, U.K., March 11–12, 2012.

11 Massolution, *Crowdfunding Industry Report: Market Trends, Composition and Crowdfunding Platforms*, Research Report - Abridged Version (Massolution: May 2012).

Angel Investment. In recent years, angel investment has become an increasingly popular theme in East Africa, often emerging in discussions with business people and policy makers. However, all available evidence suggests that, with the partial exception of Kenya, **angel investment is still in its very early stages and, in some cases, virtually inexistent.** In particular:

- The situation is comparatively more advanced in **Uganda**, where three prominent business people recently established the *Mara Launch Fund* (MLF). The initiative aims at supporting start-ups as well as existing businesses with a high-risk/high-reward profile with investments in the order of \$2,000–\$4,000, through equity participations or quasi-equity instruments. Investment activities are linked to the mentorship and incubation activities of the Mara Foundation, a not-for-profit organization established by MLF’s main sponsor. The MLF is still in its early stages, and the first investment, a company producing fire starters for charcoal stoves, was finalized in late November 2012.¹² A second, similar initiative is *Angels Finance Cooperation* (AFC), an organization set up in 2009 by three young graduates that recently received funding from a U.S.-based seed investment fund. Operational since mid-2012, AFC is planning to make investments in start-ups and early stage ventures in the \$5,000–\$20,000 range (with the possibility of follow-up funding of up to \$100,000), using both equity and convertible debt.¹³
- In **Tanzania**, a sort of business angels’ network, *Chembe Ventures*, was reportedly operational until 2009, but during fieldwork it was not possible to find any sign of recent activities. More recently, the Institute of Management and Entrepreneurship Development, a Dar es Salaam-based entrepreneurship center, has been promoting the idea of starting an angel investment network comprised of prominent figures from the local business community.

12 For more information on the MLF, see <http://www.mara-launchfund.com/>. It is worth noting that the MLF is an incorporated vehicle and, therefore, could be regarded as an investment fund. However, given the origin of funding (three wealthy individuals) and the very small target size of deals, it can be considered more akin to a business angel syndicate.

13 For more information on the AFC, see <http://www.afcuganda.com/>. The fund investing in the AFC is *S2Capital* (<http://s2cap.com/>), a social investment fund, also owned and run by a couple of very young professionals.

However, the interest in the initiative was reportedly rather modest. According to some sources, a financial advisory company, *Serengeti Advisers*, has been active in arranging financing for some ventures, but available information suggests that these deals were “classical” corporate finance operations and had little to do with angel investment.

- In **Rwanda**, currently there is no angel investment activity. A recently established investment club, *Falcon Investments*, is posited to become a sort of coordination center for business angels. The club includes some well-known business people and managers of important financial institutions, but so far the initiative has not led to any tangible result.
- In **Ethiopia**, there is scarcely any angel investment activity in the “proper” sense. As is the case in Tanzania, there are a few cases of financial advisory and consulting companies active in arranging financing for new ventures, sometimes involving foreign investors, but these activities hardly qualify as angel investment. A partial exception is represented by *AgriVest*, a joint venture between an Ethiopian consulting firm (*First Consult*) and a Dutch investment company, which is mostly active in agribusiness (*Incluvest*). *AgriVest* is structured as a “facility,” with funding provided by the Dutch partner, as well as by other investors, depending upon the opportunities identified, which indeed makes it similar to an angel investors syndicate. However, the size of deals considered (minimum \$100,000) is larger than a typical angel investment. *AgriVest* was set up in 2012 and is currently considering its first investment in a company producing biomass briquettes out of coffee parchment.¹⁴

Crowdfunding. Crowdfunding is has become fairly popular in East Africa in recent years, but **the bulk of funding has gone to philanthropic activities.** For instance, *Kiva*, one of the leading development-oriented CFPs worldwide, has been very active in the region since the mid-2000s, extending thousands of loans (more than 14,000 in Uganda alone). However, the size of loans is minimal (in Uganda the average is a mere \$241) and funds have been devoted to support microenterprises in traditional sectors (individual farmers, traders, and so on) as well as social

14 For more information on *AgriVest*, see <http://www.incluvest.com/>.

initiatives.¹⁵ *Kickstarter*, another leading CFP, has also been operating in East Africa, helping to fund some 40 projects. Such amounts are more substantial (on average about \$5,000, with several projects raising more than \$10,000), but the initiatives supported are usually of a cultural and/or social nature (and often involving expatriate promoters).¹⁶

Commercially oriented crowdfunding initiatives are much less common. A handful of business ventures have received funding through some U.S. and European CFPs, with investments typically in the \$5,000–\$20,000 range.¹⁷ However, more structured initiatives are just beginning to emerge and are largely confined to Kenya. Possibly the most significant initiative was announced in the summer of 2012 by *M:lab*, a Nairobi-based technology hub backed by Google and the Omidyar Network, which teamed up with *Grow VC*, an international CFP specialized in the crowdfunding of mobile app developers.¹⁸ Through this partnership, *M:lab* aims at securing funding in the order to \$5,000 to \$10,000 for some of its incubatees.

Opinions regarding the potential of crowdfunding in the region and its actual usefulness to address the financing gap are fairly divided. On one hand, some enthusiasts stress the degree of freedom and suppleness opened up by this system; while “crowd-investors” typically contribute rather small, entirely uncompromising funding amounts, their efforts combined can truly make a difference, occasionally topping six-digit targets. Also, crowdfunding presents the advantage of

serving as a marketing vehicle: presence on a public platform gives entrepreneurs tremendous exposure and allows them to learn about their customers’ tastes and preferences (“[crowd funding] can work as a way to advance your sales; your customers pay for you to prepare a product. Also from a speculative viewpoint, it can be useful as a marketing exercise—the public basically votes with its money, so you can learn about what works and what doesn’t.”). On the other hand, financial sector practitioners are generally more skeptical. Even leaving aside the limitations linked to the still undeveloped infrastructure of online payments, some note that crowdfunding disconnects the provision of funding from mentoring services and technical assistance, which in the case of start-ups are equally important. Also, in the case of financing provided by philanthropic platforms, which do not envisage a return on investment, crowdfunding may take performance pressure off the entrepreneurs, knowing that there are no financial returns to be expected within a strict deadline. Failing this trigger, it is thought that returns to investment will be below target (“It is no wonder that three-fourths of crowd-funded projects do not deliver on time.”).

2.5 Debt Financing

Bank lending is widely perceived to be a scarcely useful instrument to support the development of innovative enterprises, due to a variety of factors (lack of collateral, communication gaps between lenders and prospective borrowers, inflexible lending practices, and so on). However, in practice, bank lending is (and will remain for quite sometime) the main source of external funding available to MSME, irrespective of their degree of innovativeness. In addition, some of the needs voiced by innovative firms, especially in the ICT sector, are intrinsically linked to financial products (for example, guarantees to be submitted in public procurement contracts) that are typically offered by the banking sector. Therefore, the analysis of banks lending is an important complement to the analysis of investment funds and informal risk finance.

There are more than 60 banks in operation in the four countries. The analysis presented here is based on the **assessment of the operations of 12 banks**. These include “classical” commercial banks, banks with a strong focus on the lower end of the credit market (the so-called microfinance banks), and some development banks. In terms of

15 For more details on Kiva’s operations, see <http://annualreport.kiva.org/>.

16 For more details on Kickstarter’s activity in East Africa, see <http://www.kickstarter.com/>.

17 For instance, Indiegogo, another U.S.-based CFP, helped in financing some 20 businesses in the four countries analyzed. Most of the investments concern activities in “traditional” sectors (for example, a tour operator in Ethiopia). There are a few examples of innovative, technology-based initiatives, but these typically originate in Western countries (for example, some Norwegians promoting the production of solar lamp and telephone chargers in Rwanda, the production of some low-cost labs equipment promoted by a Seattle-based company, and so on). For more information on Indiegogo’s activities, see <http://www.indiegogo.com/>.

18 S. Rundell, “Backed by Google and eBay’s Founder, Crowd Funding Takes Off in Africa,” *International Business Times*, August 16, 2012. See also “Crowdfunding: The Future for African Technology,” *Ventures*, July 16, 2012, <http://www.ventures-africa.com/2012/07/crowdfunding-the-future-for-african-technology/>.

ownership, the banks analyzed include fully private banks (with both domestically and internationally owned banks), banks controlled by IFIs/DFIs, and state-owned banks. While certainly not constituting a statistically representative sample, the group of banks reviewed is believed to be sufficiently diverse to allow for the formulation of meaningful generalizations about the banking sector. The banks analyzed are listed in exhibit 2.2 below.

Basic Features. The banks analyzed cover the whole range of sizes and business models found in East Africa’s banking sector. The value of total assets ranges from a maximum of \$6.5 billion (*Commercial Bank of Ethiopia*, one of the largest banks in Africa) to a minimum of only \$20 million (Rwanda’s *FINA Bank*). The majority of banks have been in business for a long period (Ethiopia’s CBE was established back in 1942), but there are also some recently established institutions, such as *Access Bank* and *Zemen Bank*, which started operations only in the late 2000s. Some banks have undergone significant transformation in their recent past. For instance, Tanzania’s *CRDB Bank* is the result of the privatization and restructuring of the former Cooperative Rural Development Bank, and Uganda’s *DFCU Bank*, originally set up as development finance company, was transformed into a full-fledged commercial bank in the 2000s when it acquired the assets of the distressed Gold Trust Bank. IFI and/or bilateral DFI control *DFCU Bank* (majority-owned by Britain’s CDC) and have important participations in *CRDB Bank*, *Banque Rwandaise de Développement* (BRD), and *Access Bank*. The sample also includes some examples of banks operating on a multicountry basis: Rwanda’s *FINA Bank* is part of the Kenya-based FINA Group operating regionwide; Tanzania’s *Access Bank* is part of Access Group, also active in four other African countries (though none of them in East Africa); and *CRDB Bank* recently entered the Burundian market. All the banks analyzed are “fully licensed” by the regulators and, therefore, offer the whole range of banking products, that is, checking

accounts and deposits, advances and discount facilities, short- and medium-term loans, and so on. Regarding lending, development banks tend to operate more on the medium-term segment, with some offering long maturities (for example, up to 15 years in the case of the *Tanzanian Investment Bank*). In some cases, classical lending products are complemented by leasing. This is the case of the *DFCU Bank*, probably the first bank in the region to introduce leasing, back in the 1990s, as well as of TIB, *FINA Bank* and BRD, which have been benefiting from IFC support in the framework of the Africa Leasing Facility initiative.¹⁹

Attitude toward MSME. In contrast with the conventional view that banks in developing countries are not interested in dealing with small businesses, a number of recent studies suggest that in reality commercial banks regard the MSME segment as increasingly important.²⁰ In particular, a recent research paper from the *African Development Bank* (AfDB) on SME lending practices in East African countries indicates that the vast majority of banks consider SME as an interesting market and are willing to increasingly

19 For an overview of the IFC’s Africa Leasing Facility, see http://www.ifc.org/wps/wcm/connect/REGION_EXT_Content/Regions/Sub-Saharan+Africa/Advisory+Services/AccessFinance/AfricaLeasingFacility/.

20 The most interesting studies include T. Beck, A. Demirgüç-Kunt, and M. S. Martinez Peria, “Bank Financing for SMEs around the World: Drivers, Obstacles, Business Models, and Lending Practices,” Policy Research Working Paper 4785 (Washington, DC: World Bank, 2008); T. Beck, A. Demirgüç-Kunt, and M. S. Martinez Peria, “Bank Financing for SMEs: Evidence Across Countries and Bank-Ownership Types,” *Journal of Financial Services Research* 39 (2011): 35–54; A. De la Torre, M. S. Martinez Peria, and S. Schmukler, “Bank Involvement with SMEs: Beyond Relationship Lending,” *Journal of Banking and Finance* 34 (September 2010): 2280–2293; and C. Stephanou and C. Rodriguez, “Bank Financing to Small- and Medium-Sized Enterprises (SMEs) in Colombia,” Policy Research Working Paper 4481 (Washington, DC: World Bank, 2008).

EXHIBIT 2.2: Banks Analyzed

- Commercial Bank of Ethiopia (Ethiopia)
- Dashen Bank (Ethiopia)
- Zemen Bank (Ethiopia)
- Bank of Kigali (Rwanda)
- Banque Rwandaise de Développement (Rwanda)
- FINA Bank (Rwanda)
- Access Bank (Tanzania)
- CRDB Bank (Tanzania)
- Tanzanian Investment Bank (Tanzania)
- Centenary Bank (Uganda)
- DFCU Bank (Uganda)
- Uganda Development Bank (Uganda)

engage in MSME lending.²¹ Lending to MSME is still constrained by a series of obstacles, but SME loan portfolios are nonetheless growing. The analysis carried out for this Study generally confirms this finding.

Virtually all the banks analyzed demonstrate a **significant interest toward the MSME segment**, with only few displaying skepticism or indifference. In development banks and microfinance banks, the interest in MSME results directly from their policy mandate or overall mission, whereas in commercial banks purely commercial and economic considerations are at play, with a combination of push and pull factors (“*small businesses constitute the core of our economy, we cannot ignore them, “now competition [in the banking sector] has increased and we cannot afford any longer to concentrate only on corporate clients”*). Obviously, not all the banks place the same emphasis on MSME: for instance, *Zemen Bank’s* “single branch” business model inevitably leads to a focus primarily on larger clients, but this does not mean that smaller businesses are neglected. It should be noted that the definition of what constitutes an MSME varies significantly across banks and countries. In some cases, the definition makes reference to the size of the firm, measured in terms of turnover, with values ranging from as little as \$7,500 up to \$3 million. In other cases, reference is made to the size of the loan, with value ranging from zero to \$600,000. Obviously, the absence of a common definition of MSME makes comparisons across banks somewhat inconsistent, although the subjective perception of what is an MSME is nonetheless meaningful.

In many cases, lending to small businesses is **entrusted to special “SME units.”** The status of these units varies. Often, it is a unit within the corporate finance department or the retail credit department; more rarely is it a department in its own right, reporting directly to the CEO. In any event, the status of the SME unit is not necessarily indicative of the importance attached to the small business segment. In one case, the recent merger of the SME department with the corporate department to create a new business banking department was presented as an improvement over the previous situation, as it “*has led to the adoption*

of more uniform criteria” (implying that under the previous setup MSME were treated less favorably). In the majority of banks, the loan approval process is still highly centralized, irrespective of the size of loans. However, there are also cases in which, in order to facilitate the interaction with smaller clients, authority for approving loans below a certain threshold (usually up to \$5,000 or \$10,000) has been delegated to branch managers.

The **volume of MSME lending** varies enormously, from 90 percent in microfinance banks (for example, Uganda’s *Centenary Bank*) to less than 10 percent in full-service banks (for instance, *Zemen Bank*). However, due to the different definitions of MSME used, these figures are not fully comparable. In very broad terms, also considering the results from the aforementioned AfDB study on East African banks, it can be said that on average MSME account for anywhere between 35 and 50 percent of the total loan portfolio, with higher values in Uganda and Rwanda and lower ones in Tanzania and Ethiopia. Irrespective of the absolute value, the relative importance of lending to small businesses is increasing. This is partly due to the presence of several credit lines and other special programs financed by IFI and donors specifically targeted at the MSME segment. In fact, the majority of the banks analyzed had at least one credit line with IFI/donors.²²

While the overall situation shows clear signs of improvement, **lending to SME is still constrained by serious obstacles.** Apart from the poor intrinsic quality of many business proposals and/or the limited managerial skills of many entrepreneurs (“*let’s face it, many people are not real entrepreneurs”*), the main obstacles concern the “informality” of small clients (which translates into the lack of information to appropriately appraise loan applications) and the limited ability to mobilize appropriate collateral. The issue of **informality** is of a structural nature and inevitably will require time to be addressed in a satisfactory manner. Only in rare cases (for example, *FINA Bank* in Rwanda), do banks display a proactive stance and provide assistance to prospective clients in putting together the financial information and business plans that are required for loan appraisal. The issue of **collateral** is obviously of paramount importance for bankers, although practices are not always as rigid as generally

21 P. Calice, V. Chando, and S. Sekioua, “Bank Financing to Small and Medium Enterprises in East Africa: Findings of a Survey in Kenya, Tanzania, Uganda and Zambia,” Working Papers Series 146 (African Development Bank, March 2012).

22 The only country where banks only work with domestic resources is Ethiopia, as the government has a restrictive policy concerning foreign borrowing to keep the country’s overall indebtedness under control.

perceived. While the prior availability of sizable collateral, ideally in the form of a mortgage on real estate, is generally the rule, there are also banks that accept as collateral the goods that are purchased through the loan, an arrangement not too dissimilar from a leasing contract. The issue

of collateral is also increasingly alleviated by the use of credit guarantees that are provided through various government and/or donor/IFI schemes. An overview of the credit guarantee schemes currently at work in the four countries is provided in box 2.2 below.

BOX 2.2: Credit Guarantee Schemes

Credit guarantee schemes (CGSs) aim at facilitating access to bank lending through the provision of guarantees that eliminate (or at least reduce) the need to provide other types of guarantees (mortgages on real estate, pledges on movable goods).²³ Usually, CGSs are public institutions, but in developing countries these schemes are often set up by donors or IFIs. Over the last decade, credit guarantees have become increasingly popular in East Africa and CGSs are now operational in all the countries analyzed. National schemes are supplemented by the African Guarantee Fund for SME recently launched by the AfDB.

Ethiopia. A public CGS scheme is run by the Federal Micro and Small Enterprise Development Agency (FeMSEDA), in collaboration with regional governments. The scheme provides a 50 percent guarantee for loans worth up to \$25,000 extended to microenterprises active in manufacturing and in the construction industry. The scheme was launched at the beginning of 2012, and by end of the year had benefited some 250–300 firms. Some Ethiopian private banks (including *Zemen Bank*) also have access to credit guarantees for loans to SME and agribusiness provided by USAID. An earlier scheme, focused on agriculture, was highly successful, being extensively used by banks (some 160 loans worth \$27 million); conversely, the current program, characterized by more stringent eligibility criteria, has so far met with modest success.

Rwanda. Several government credit guarantee facilities are run by the Business Development Fund (BDF), a subsidiary of the BRD. These include a general SME facility (providing guarantees for loans worth up to \$240,000) as well as thematic or sector-oriented schemes (for example, Agricultural Guarantee Fund, Women Guarantee Fund, and Retrenched Employees Facility). These schemes appear to be fairly popular among commercial banks; since its beginnings, the BDF has reached over 200 agricultural projects enabling loans for a total of \$14.3 million, and 121 SME loans worth a total of \$6 million. Some Rwandan banks (including *Bank of Kigali* and BRD) also benefit from credit guarantees provided by USAID as well as from a similar program funded by France's AFD (ARIZ program). Recently, a small credit guarantee facility has been promoted by Enablis East Africa, a not-for-profit organization supporting local entrepreneurship, and discussions are currently ongoing with *Bank of Kigali*.

Tanzania. A government-funded SME CGS managed by the Central Bank has been in operation since 2004. However, the scheme has been scarcely used by commercial banks and in nearly 10 years it has supported lending to small businesses worth only a meager \$8 million. More popular is the DANIDA-financed Private Agricultural Sector Support (PASS) scheme that has facilitated lending to agribusinesses for an estimated total of \$20 million. However, this was seemingly at the expense of the quality of the portfolio, with the main partner bank, *CRDB Bank*, reporting a significant share of loans in arrears.²⁴ Much more positive results have been achieved by the USAID scheme, which in just three years extended guarantees to some 140 loans to agribusiness ventures (with a total value of nearly \$30 million), without any incurring a default.

Uganda. In Uganda, CGSs mostly target agriculture, with a focus on microlending. The scheme managed by the AgriBusiness Initiative Trust (ABi), a multidonor platform for supporting agricultural development, is working with seven banks and microfinance institutions (including *Centenary* and *DFCU*) and so far has supported more than 22,000 loans, worth some \$14 million. Only one bank (*Stanbic*) is focusing on large deals, with some 20 loans above \$200,000. A USAID guarantee scheme launched in 2010 so far has supported some 2,000 loans, worth almost \$7 million. Finally, a small CGS funded by the Rockefeller Foundation is used by Centenary Bank.

African Guarantee Fund for SME. The African Guarantee Fund for SME (AGF) is an initiative of the AfDB co-financed by the governments of Denmark and Spain, with an initial capital of \$30 million. Headquartered in Nairobi, the AGF was officially launched on June 1, 2012, and in the initial two to three years of operations is expected to focus on nine countries, including Tanzania and Uganda. Tanzania's *CRDB Bank* is expected to be one of the first banks in the region to benefit from AGF guarantees.

23 For a recent and well-documented review of CGSs, see T. Beck, L. F. Klapper, and J. C. Mendoza, "The Typology of Partial Credit Guarantee Funds around the World," Policy Research Working Paper 4771 (Washington, DC: World Bank, November 2008).

24 See DANIDA, *Evaluation of Danish Support for Financial Services in Tanzania*, August 2009. It should be noted that CRDB Bank, the main user of PASS guarantees, is also participated (and de facto managed) by DANIDA.

It is interesting to note that, although SME lending is generally regarded as riskier than classical corporate lending, the actual default rates are not particularly high. Banks were usually unable to provide data on nonperforming loans (NPLs) by class of clients, but the general impression is that **default rates for MSME are not higher than for other categories of clients, and possibly lower.** For instance, in the case of *Access Bank* and *Centenary Bank*, whose portfolios are dominated by loans to MSME, NPLs are in the order of 1.5–2.5 percent, well below the corresponding value for the majority of commercial banks (around 8–10 percent). Lending rates differ across countries due to differences in monetary policy: with a higher inflation rate, in late 2012 Uganda had a prime rate of about 23–24 percent, compared with 14–15 percent in Tanzania and Rwanda and 10–12 percent in Ethiopia. Lending rates to MSME are obviously higher, with a **risk premium ranging from four to ten percentage points**, depending upon the country, the nature of the loan and the typology of bank (with development banks using a lower premium).

Attitude toward Start-Ups/Innovative Firms. The increasingly positive stance toward MSME does not translate into an equally open attitude in relation to start-ups, especially if involved in “unusual” activities. Most banks require prospective borrowers to have been in business for at least a couple of years, and **start-up ventures are viewed with great skepticism.** A more open attitude is noticeable in banks that have some experience of collaboration with incubators, although results are not necessarily positive. In particular, TIB has been cooperating for some time with three incubators and, at times, this led to the adoption of innovative solutions to support some incubated firms (see box 2.3). But overall numbers remain

quite unimpressive: out of the 150 incubatees recommended to TIB by the publicly funded Small Industries Development Organization (SIDO), only three eventually managed to get a loan.

There are also other cases of banks increasing their lending to start-ups, but this is the result of specific government or donor-funded initiatives. In Rwanda, banks have been urged to participate in the government-sponsored *Hanga Umurimu* (“Start your own business”) program, and at the end of the pilot phase some 200–220 ventures (but not all of them are start-ups) managed to get loans worth on average \$8,000. In Uganda, three banks (*Stanbic*, *DFCU Bank*, and *Centenary Bank*) contributed to the funding of the government-sponsored Youth Venture Capital Fund (YVCF), intended to provide funding up to \$20,000 to prospective young entrepreneurs and newly established ventures (in business for not more than three months). Finally, in Ethiopia, *Dashen Bank* recently cooperated with the World Bank-funded Ethiopian Competitiveness Facility, providing funding to the winners of the Business Plan Competition program, with some 60 loans worth about \$30,000 (see below). In all these cases, **commercial banks’ willingness to engage with start-ups was contingent upon the availability of co-financing from donors** (in Uganda 50 percent of YVCF’s funding is provided by Germany’s KfW) **or credit guarantees from the government** (which, in Rwanda, are as high as 75 percent of the loan value).

Attitude toward the Target Sectors. Commercial banks are almost by definition generalist providers of funds and, therefore, typically do not have sector preferences or exclusions. Some lines of business may be regarded more or less favorably, but this is usually related to the prevalent features

BOX 2.3: Innovative Approaches to Facilitate Access to Finance

Based in Dar es Salam (Tanzania), *Blackmark Corporation* is active in the development of information management solutions for institutional clients. In 2011, the company joined the Dar Teknohama Business incubator, the incubation program set up by the *Commission for Science and Technology* (COSTECH). In 2012, *Blackmark* won a sizable tender (worth some \$310,000) with a government agency and urgently needed liquidity for working capital. After earlier unsuccessful attempts (due to the lack of adequate collateral), *Blackmark* was eventually able to get an \$63,000 loan from TIB. The loan was granted with the condition that it would be disbursed in an account where COSTECH would be co-signatory. In this way, TIB accepted to replace classical collateral with a sort of “moral guarantee.” Discussions are reportedly ongoing between TIB and COSTECH to mainstream this type of approach, so that other incubatees may access TIB funding in the future.

of the firms, rather than to the sector itself. The attitude toward the three target sectors can be summarized as follows:

- **Agribusiness.** Agribusiness is generally regarded as an important sector and most banks are extensively involved in lending to agribusiness firms. The few, partial exceptions are due to the structural features of certain banks (for example, due to its relatively recent establishment, Tanzania's *Access Bank* still has a small network, largely concentrated in the Dar es Salaam area). In some development banks, agribusiness is often a key area of intervention, with specialized lines of credit and/or specialized units in charge of agricultural lending, although in these cases the emphasis is mainly on primary agriculture. The range of projects financed is very wide, from the upgrading of agro-processing plants to large vertically integrated initiatives. Lending terms vary across countries and banks, but in some cases they are quite favorable. For instance, in the *Development Bank of Ethiopia* (DBE), the interest rate charged for sectors held as national development priorities (which include a host of agribusiness activities, from improved seed multiplication to biofuels) is a very low 8.5 percent (in practice a negative interest rate in real terms) and the duration can go up to 20 years, with a grace period of 5 years. Unsurprisingly, DBE loans are considered as a potentially important source of financing by firms considering sizable investment projects (such as *African Bamboo*, which is planning to launch an integrated bamboo product operation; see annex E).
- **ICT and ITES.** Banks' attitude toward firms in ICT/ITES varies, although a conservative attitude tends to prevail. In most cases, activities such as software development are a priori regarded as excessively risky. To a very large extent, skepticism toward ICT firms is linked to the generally young age of these businesses, which often do not meet the minimum requirement of having been in business for at least a couple of years. The skeptical attitude is also due to a lack of familiarity with this line of business ("we haven't seen many projects in ICT," "there is little market for these operations") and some banks openly admit their inability to appraise the merits of ventures concerning, say, the development of some web-mobile application ("in such a case, we would need to supplement

our internal staff with consultants, but this is costly"). The intangible nature of the assets of ICT firms is also mentioned as a problem, but here the approach is not dogmatic. For instance, Ethiopia's CBE recently turned down an application from an ICT company for a sizable project, but the collateral issue was not an issue per se ("We spent a fortune for our MIS [management information system] and we are fully aware of the value of intangible assets: simply that project was not good enough").²⁵ Bankers' attitudes are obviously much more favorable in the case of established clients involved in more tangible ICT-related activities, such as import and distribution and, more rarely, the assembly of hardware. For instance, some companies active in these areas were indicated by Ethiopia's *Zemen Bank* to be among their best clients. Few banks seem to have had any experience with ITES, but some transactions were nonetheless reported in two countries (some BPO operations in Rwanda and a disaster recovery site in Ethiopia). A special situation is represented by the financing of working capital needs of ICT firms awarded public procurement contracts (for example, for the design and management of websites, the development of e-government solutions, and so on). While the presence of a contract with a safe client is obviously regarded as a positive feature, the lack of collateral may still pose problems. In these cases, the availability of credit guarantees could be very important to provide some comfort and tilt the balance in favor of the award of the loan ("we receive several applications in this area, a 50 percent credit guarantee would be just perfect").

- **Climate Technology.** The notion of climate technology activities is not readily understood by most bankers, who tend to focus on more conventionally defined lines of business ("a distributor of solar equipment for us is a trader, not much different from those distributing other equipment"). In general, banks have limited experience with firms active in this sector, because most of the projects in renewable energy have been financed through grant schemes and/or special credit lines. An exception is represented by TIB, which (partly thanks to the experience gained as manager

²⁵ At first we thought it could be an excuse, but then we learned more about the project and came to the same conclusion. The project was turned down by another (private) bank with the same motivation.

of a World Bank-funded credit line) has been involved in some transactions concerning commercially oriented off-grid schemes.

2.6 Grant Schemes

Commercial sources of finance are complemented by a variety of grant (or quasi-grant) schemes established by government authorities or donors. Most of the schemes currently in existence are of a general nature, pursuing very broad objectives (for example, job creation, entrepreneurship development, and so on), but there are some initiatives particularly relevant for the purposes of this Study. These include the Africa Enterprise Challenge Fund, which operates at the regional level, and some thematic/sector-specific programs at the country level.

Africa Enterprise Challenge Fund. The Africa Enterprise Challenge Fund (AECF) is a matching grant facility promoting pro-poor growth, providing support to **innovative initiatives in the agribusiness and climate technology sectors**. The AECF was launched in mid-2008 by the Alliance for a Green Revolution in Africa (AGRA) with an initial funding of \$36 million, provided by the U.K. Department for International Development (DFID) and other donors. Over time, the scope of the fund was broadened and funding increased, topping **\$190 million**, provided by a pool of bilateral donors and the International Fund for Agricultural Development (IFAD). The AECF provides funding to enterprises through **several windows**, including (i) a general agribusiness window, operating on a pan-African basis, (ii) several country-specific windows (for Tanzania, Zimbabwe, South Sudan, and DR Congo), and (iii) two thematic windows, the Research Into Business (RIB) window and the Renewable Energy and Adaptation to Climate Technologies (REACT) window. The AECF provides support **only to private companies in the form of grants and/or interest free loans**. Funding ranges from a minimum of \$250,000 to a maximum of \$1.5 million (\$100,000 to \$1 million in Tanzania) and can be used for both investment purposes and working capital. Funding is awarded through a series of successive “investment competitions,” involving a two-stage selection process (a concept note competition followed by a shortlisting and business plan competition).

As of the end of September 2012, 14 investment competitions had been completed and the AECF had approved **a total of 133 projects in**

22 countries, with a total financing in the order of \$100 million. Updated information on the breakdown of projects by country is not available, but by early 2012, the AECF had funded 36 projects in Tanzania, Uganda, and Rwanda (the AECF does not operate in Ethiopia), which at that time accounted for 40 percent of the total number of projects and for 33 percent of the total value of funding awarded. Due to the presence of a dedicated window, Tanzania was the main recipient country, with 26 projects, followed by Uganda and Rwanda, with seven and three projects, respectively. The average size of projects in the three countries was somewhat smaller (\$600,000) than the overall average (\$730,000).

The 133 beneficiaries were selected out of nearly 4,500 concept papers initially submitted, some 700 companies shortlisted and about 300 business plans reviewed. The low success rate is clearly indicative of the **limited quality of the business ideas submitted at the concept paper stage**, an aspect that was confirmed during interviews. The majority of projects that received funding are reportedly performing well in economic and financial terms, but the fact that results are essentially self-reported may introduce some bias.²⁶ AECF funding has supported the adoption of improved and new technologies, but the portfolio displays a degree of innovativeness lower than expected. At the beginning of 2012, only 40 percent of the projects funded under the agribusiness window were considered highly innovative (that is, new to both the company and the country in which the project takes place), significantly below target (50 percent for 2010 and 60 percent for 2012). Problems have also emerged in the REACT window, as the fund was able to attract only few proposals in the area of climate adaptation.²⁷ As significant efforts were deployed by the fund manager to attract the interest of relevant business circles, the difficulties encountered in achieving the innovation targets clearly suggest that **the pipeline of good quality innovative projects may be smaller than envisaged**.

²⁶ This does not necessarily mean that results might be inflated. In fact, as the achievement of results also triggers the reimbursement of soft loans, beneficiaries may also have an interest in underreporting achievements. On this point, see DFID, *Annual Review: Africa Enterprise Challenge Fund* (London: DFID, February 2012).

²⁷ See DFID, *Annual Review: Renewable Energy and Adaptation to Climate Technologies (REACT)* (London: DFID, October 2012).

The AECF's management structure is broadly reminiscent of that of an investment fund, although it is considerably more elaborate. The fund is an unincorporated facility and donors' money is managed on a fiduciary basis directly by AGRA. Accordingly, overall management responsibility is entrusted to the Board of Directors of AGRA, assisted by a Governing Council of the AECF, which comprises representatives of AGRA and the donors. AGRA retains responsibility for the handling of financial matters (that is, payments to beneficiaries); other operational aspects are entrusted to a fund manager.²⁸ Funding decisions are made by an investment committee, composed of independent experts. The fairly complex management structure and the complexity of the selection process translate into significant administrative and operational expenses. Overall, the **management costs are at 20 percent of the value of funds under management**, of which 4 percent goes to AGRA and 16 percent to the fund manager.

Country-Specific Grant/Subsidy Schemes. Three country-specific grant/subsidy schemes are particularly relevant for the Study: (i) Tanzania's Innovation Fund established within the framework of the Information Society and ICT Sector Development Project (TANZICT), funded by the Finnish development cooperation program; (ii) the Business Plan Competition component of the World Bank-funded Ethiopian Competitiveness Facility (ECF); and (iii) the former financing scheme for innovative ventures set up at the Kigali Institute for Science and Technology (KIST), known as the KIST Enterprise Development Fund.²⁹

28 Unlike the case of investment funds, the fund manager was selected through an international tender. The current fund manager is KPMG Development Advisory Services.

29 For obvious reasons, the analysis does not cover the grant-funding facilities attached to the *infoDev* initiatives currently under implementation or envisaged, such as Ethiopia's CIC and Tanzania's AIC. In addition, the analysis does not cover: (i) the existing or envisaged renewable energy financing programs (often funded by the World Bank or other IFI), as the bulk of the funding is reserved to initiatives promoted by local communities or power companies (for example, the World Bank-funded Energy Development and Access Expansion Project in Tanzania); and (ii) the matching grant schemes whose purpose is solely to support the purchase of consulting and other business development services, without contributing to the funding of investments or working capital needs (for example, DANIDA's SME Competitiveness Facility supporting agribusiness firms in Tanzania).

The salient features of these schemes can be summarized as follows:

- **TANZICT Innovation Fund.** The fund is a competitive grant fund aimed at supporting ICT start-ups with *"innovative projects fostering solutions to social and economic problems,"* with the objective of bringing *"new products and services to demo, prototype or pilot stage."*³⁰ Managed by COSTECH and with an estimated budget of about \$600,000, the fund will provide grants to start-ups selected through a call for proposals mechanism. Grants are expected to be in the \$5,000–\$10,000 range. An essential condition for being considered for funding is participation in one of the existing incubation programs, such as the Dar Teknohama Business Incubator, KINU Innovation Hub, or the Dar es Salaam University incubators. These incubators are to play a supervisory role, ensuring that the activities envisaged in the grant agreement are duly implemented. Although referred to as "Guarantor," the incubators do not play any financial role, and the grant money is disbursed directly to the beneficiary start-ups. The fund is in its launch phase and the first call for proposal, envisaged to result in the funding of half a dozen initiatives, was reportedly closed at the end of November 2012.
- **ECF Business Plan Competition.** The ECF Business Plan Competition (BPC) provides grants of \$15,000 to support the development and commercialization of innovative business ideas promoted by start-ups or firms in the early stages of development. With a total budget of about \$900,000, the BPC was launched in 2006, and by the end of 2012 it had provided funding to 60 start-ups or SME, with another 10 grants expected to be awarded during an upcoming competition. The initiatives supported by the BPC span a wide range of activities, with a solid majority in agribusiness (apple tree seed production, production of organic fertilizer, production of sugar from cactus, and so on) and manufacturing (production of water pumps, production of paints and inks, manufacturing of modern scaffolding equipment, and so on), some initiatives in renewable energy (production of

30 TANZICT, "Guidelines for the TANZICT Innovation Fund for ICT Innovations" (Dar es Salaam: TANZICT, November 11, 2012).

ethanol stoves, production of charcoal from agricultural crop residues, and so on) and a handful of projects in ICT/ITES (setting up of a digital info-center, establishment of a 3-D computer animation studio, and so on).³¹ Modalities for the disbursement of grants evolved during implementation and BPC constitutes an interesting example of how grant funding can be linked to bank lending. A more detailed analysis is presented in box 2.4.

- **KIST Enterprise Development Fund.** The KIST Enterprise Development Fund (KEDF) was established in 2004 with funding from Rwanda's President's Office (\$100,000) and the United Nations Development Programme (\$100,000) and was reportedly operational until the late 2000s. The KEDF provided support to start-ups and firms in the early stages of development that had benefited from KIST virtual

31 For general information on ECF, please see <http://the-ecf.com/>. Information on beneficiaries is out of date and was updated with elements collected during fieldwork.

incubation support (the so-called without-wall incubatees). Funding was provided in the form of subsidized loans (carrying a 12 percent interest rate), with a maximum amount of \$25,000 per beneficiary, and was disbursed through a savings and credit cooperative. The precise number and nature of beneficiaries is not known. However, available information suggests that as of late 2009, a total of 15 start-ups had benefited from the scheme, of which about a third were active in ICT or the climate technology activities.³²

32 For a summary description of KEDF activities, see Rajeev Aggarwal, "Case of Technology and Business Incubation Facility (TBIF)." Presentation to the African Incubator Network workshop on Business Incubation in East and central Africa, Kampala, Uganda, July 12-13, 2007; and Rajeev Aggarwal, "Kigali Institute of Science and Technology (KIST) . . . Pioneer and Committed to the Industrialisation in Rwanda." Presentation at the Africa Industrialization Day, November 27, 2009.

BOX 2.4: Linking Grants to Bank Lending

The modalities for the disbursement of BPC grants have changed over time. In the first round, the \$15,000 grant was disbursed in cash (except for a small in-kind part consisting of technical assistance services) directly to the winners of the competition. However, results were somewhat disappointing, as several projects were eventually not implemented ("They simply cashed in the prize and left"). Starting with the second round, the program management unit devised a new mechanism, whereby (i) the grant is deposited in an account opened with a partner bank (*Dashen Bank*); (ii) the money cannot be used immediately by the winner, but instead serves as cash collateral for a loan granted by the bank and worth up to \$30,000 (that is, twice the value of the cash grant); and (iii) the grant money becomes available to the winner only upon the full reimbursement of the loan, effectively becoming a "reward" not just for the quality of the business plan submitted but also for the actual behavior of the winner. Instead, in case of default, the grant money would be seized by the bank in order to reduce the loss. This new mechanism contributed to a dramatic increase in the success rate, with reportedly no problematic case among second- and third-round winners. Additional positive aspects include (i) the high multiplier achieved (with the winners receiving in the end a total funding of about \$45,000 against a cost of only \$15,000); and (ii) the positive influence in bridging the gulf between promoters and financial institutions (*Dashen Bank* became familiar with new business ideas and the winners learned firsthand how to interact with banks).

3 Financing of Innovative Firms: Demand Side

3.1 Introduction

This Section analyzes the **financing needs of firms active in the three target sectors, ICT, climate technology, and innovative agribusiness activities**. The analysis is based on the elements collected through the interviews with innovative firms carried out during fieldwork as well as on information retrieved from previous studies that reviewed sector- and country-specific financing needs.³³

Three points are worth noting from the outset. First, the analysis covers the **financing needs of firms at different stages of development**. Although, in line with the general orientation of the Study, special emphasis is placed on financing needs of ventures at the seed and start-up stages, the analysis was also extended to the development stage, that is, to firms envisaging first or second expansion. Second, the expression “financing needs” encompasses **all types of external funding**

sought by innovative firms, be it for investment or working capital purposes. Third, the figures presented here **typically refer to the financing needs “voiced” by firms’ representatives**. While efforts were made to ascertain whether these financing requests were reasonable, it was not possible to proceed to a detailed review of business plans or feasibility studies (which in many cases simply do not exist), and to assess the merits of specific ventures. Therefore, the examples presented in this section must be regarded as illustrative only, and should not induce to any judgment regarding the viability of specific ventures.

The section is structured as follows: section 3.2 provides an overview of the three target sectors at the regional level; section 3.3 focuses on the financing needs in the ICT sector, including IT-enabled activities; section 3.4 focuses on the financing of innovative activities in agribusiness; and section 3.5 deals with the financing of climate technology-related activities. A more detailed presentation of the financing needs of a selection of firms and projects interviewed during fieldwork is provided in annex E.

3.2 Regional Overview

ICT Sector. Following the taxonomy adopted in a recent study on the East African ICT industry,³⁴ **the sector can be subdivided into four segments:** (i) telecoms, including fixed and mobile communications and Internet service providers (ISP); (ii) hardware, comprising manufacturers’ representatives, resellers, and distributors; (iii) software, which includes branded proprietary software providers and local proprietary and non-proprietary application software providers; and (iv) information technology-enabled services (ITES), which include business process outsourcing (BPO), hardware maintenance, and IT consultancy. According to an *infoDev* study on the ICT sector in East Africa, as of late 2010 the region (excluding

³³ The sources used include (i) general studies on the sectors concerned (such as *infoDev, Growing Food, Products, and Businesses: Applying Business Incubation to Agribusiness SMEs*, Washington, DC: World Bank, October 2011; and Capital Markets Authority, *Impact Investing: Challenges and Opportunities in the East Africa ICT Sector*, 2010), (ii) operational documents for new initiatives, such as the proposal for a new technology incubator in Tanzania (I/O Ventures, *Connecting Tanzania to Silicon Valley Through I/O Ventures*, undated) and the business plans for new *infoDev* initiatives (*infoDev, Ethiopia Climate Innovation Center: CIC—A Business Plan for the Financing and Implementation of a CIC in Ethiopia*, 2011; and *infoDev, Climate Innovation Center Business Plan: Kenya*, November 2010; and *infoDev, Creating Jobs through Agribusiness Innovation: The Agribusiness Innovation Center (AIC) of Tanzania*, draft for internal review, September 25, 2012), and (iii) company and investment profiles published by some investment funds or other financial schemes (such as the investment profiles published by the AECF). Not all secondary sources proved equally useful for the analysis, as in several cases the description of the business initiatives is not accompanied by a quantification of the funds requested.

³⁴ Capital Markets Authority, op. cit.

Ethiopia) was home to 3,000 to 5,000 ICT SME. Of these, between 1,000 and 2,000 were concentrated in Kenya only.³⁵ This order of magnitude is broadly confirmed by ballpark estimates provided by key informants met during fieldwork as well as by some business censuses recently conducted. In Ethiopia, the ICT Association–Ethiopia (ICT-ET) has a membership of more than 300 businesses, including many diaspora Ethiopians with highly performing businesses. In Rwanda, the Private Sector Federation’s recently established *ICT Chamber* has some 120 members, mainly MSME, while the total number of establishments active in the information and communication sector is set at 558 by the 2011 Establishment Census.³⁶ However, the latter figure is somewhat inflated, as the census also covered nonprofit and public organizations and adopted the International Standard Industrial Classification (ISIC) encompassing, among other things, publishing-related businesses and broadcasting activities. In Uganda, according to the 2010/11 census findings, there are more than 1,300 ICT businesses, including some 450 businesses involved in computer programming and other computer activities.³⁷ All in all, at the regional level, the **ICT sector can be grossly estimated to comprise between 2,500 and 3,500 businesses.** Obviously, this number is an approximation and subject to swift variation, as new ICT ventures are launched almost on a daily basis; however, several of them disappear just as rapidly.

While no precise figures regarding the size and activities of ICT firms are available regionwide, the majority of operations are micro and small

businesses³⁸ involved in web design, user interface development, content generation (and adaptation to local languages), software development and remote delivery of services. Embracing all these various components, the **software segment attracts the majority of deals in the ICT pipeline, regionally. Some opportunities also exist in the ITES segment.** In particular, the BPO subsector has witnessed both the regional expansion of domestic players (for example, Tanzania’s *Techno Brain* has penetrated the nascent BPO industry in Ethiopia, Kenya, and Uganda) and the entry of international companies (for example, India’s *Spanco BPO* was recently awarded a contract to run *Warid Telecom*’s call center operations in Uganda), suggesting that this is an untapped area fraught with opportunities to seize. In light of these developments, some national governments have been deploying significant efforts to spur entrepreneurship in this subsegment: the *Rwanda Development Board* is inviting investors to establish BPO companies in Kigali City to cater for international companies and nongovernmental organizations (NGOs) and in Uganda a BPO incubation center had been set up by the end of fiscal year 2011/12. Vice versa, due to the increasing affordability of computers, mobile phone penetration and easy Internet connectivity, the number of cybercafés has been significantly declining in recent times (in Rwanda, it decreased from about 300 to 130 between 2008 and 2010).

The two remaining segments display less potentially interesting ventures. The **telecom segment is still reserved to a modest number of large operators**, including numerous international strategic investors, such as Luxembourg’s *Millicom International Cellular*, South Africa’s *MTN*, and India’s *Bharti Airtel*. The number of operators dwindles from almost 50 licensed

35 *infoDev, Transforming East African ICT Sector by Creating a Business Engine for SMEs* (Washington, DC: World Bank, February 2011).

36 Ministry of Trade and Industry (MINICOM), Ministry of Public Service and Labour (MIFOTRA), Private Sector Federation (PSF), and National Institute of Statistics of Rwanda (NISR), *Establishment Census 2011: Analytical Report* (Kigali, August 2011).

37 Uganda Bureau of Statistics, *Census of Business Establishments, 2010/11* (Kampala, December 2011).

38 According to the Rwanda Establishment Census 2011, 87 percent of the 558 ICT censused establishments were classified as micro (1 to 3 employees) and 12 percent as small (4 to 30 employees). According to the Ugandan Census of Business Establishments, 85 percent of the 1,326 ICT censused establishments had between 1 and 4 employees, and 12 percent between 5 and 19 employees.

telecommunications service providers and over 30 ISP offering both broadband and dial-up Internet services in Uganda, to only a couple of fixed-line operators (*TTCL* and *Zantel*) and 8 operational mobile networks in Tanzania,³⁹ to a national monopoly in Ethiopia, where all telephone service and Internet access requires *Ethio Telecom's* involvement. The **hardware segment primarily consists of vendors of imported products, relying on a large pool of distributors, resellers and dealers.** Local manufacturing/assembly of ICT equipment is nearly nonexistent in the region. Rwanda became the first country in the region with a local ICT assembly initiative in place as, in 2007, the Chinese *A-Link Technologies* set up a \$500,000 mobile phone assembling factory. Despite initial plans to expand its product range to also assemble laptops and radios, the company underwent significant workforce cuts when sales of mobile handsets declined due to strong competition for cheaper imported handsets (import duty on mobile phones slashed from 18 to zero percent in 2009). On the other hand, some positive developments have taken place in Ethiopia in recent times: *Tecno Mobile Ethiopia*, a subsidiary of the Hong Kong-based mobile manufacturer, entered the Ethiopian market in 2011 and is poised to release the first entirely locally assembled smartphone; at the same time, two more ventures, one Chinese (*Smadl*) and the other locally owned (*Tana Communication PLC*), recently started assembling mobile handsets and other ICT devices.

Innovative Agribusiness Sector. The agribusiness sector encompasses a variety of activities, conducted both on- and off-farm, including (i) food production (for example, crop cultivation and animal rearing), (ii) the generation or acquisition of production inputs (for example, seeds), (iii) the transformation of farm produce (for example, agro-processing and food manufacturing), and (iv) the trading of farm products (merchandising, exporting, and retailing). The innovative agribusiness activities analyzed in this Study are defined to **include initiatives that involve some type of technological innovation and/or the adoption of innovative business models.** While intuitively appealing, the definition is difficult to operationalize, due to (i) the extremely wide range of technological innovations that may be introduced (from the introduction of cutting-edge

39 However, four additional players were recently licensed under a new converged regulatory regime.

bio technologies to the upgrading of indigenous production techniques), and (ii) the context-specific nature of innovation (that is, a certain technology may be already in use in a given country but be highly innovative for a specific firm). This has important consequences in delineating the boundaries of the subset of agribusiness activities potentially of interest and, therefore, in quantifying (albeit tentatively) the number of business ventures to consider. For instance, if the focus is on the potential for innovation and on the “medium-level” innovation associated with the purchase of commercially available products or equipment (for example, refrigerated cooling tanks for milk collection), the number of firms potentially of interest is very wide, as it encompasses virtually all the actors in certain subsectors or value-chains/clusters.⁴⁰ Instead, if one adopts a more stringent definition of innovation (that is, a certain activity must be innovative both for the country and for the firm) and the emphasis is placed on actual rather than on potential behavior, then numbers decline dramatically. For instance, in the AECF, after four years of operations, only 40 percent of the project portfolio can be considered as innovative, a share significantly lower than initially envisaged.⁴¹ For the purpose of the Study, the focus will be placed on two segments of the agribusiness value chain, agro-dealers and agro-processing, as well as on some agribusiness support industries and services.

Agro-dealers sell and distribute agro-inputs, such as seeds, fertilizers, and pesticides, but also farm equipment, machinery, and irrigation systems. **The number of ventures in the region is still rather limited, in the order of some tens of businesses.** For instance, in Rwanda, the Government currently serves as the primary fertilizer importer and distributor, with only a handful of companies supplying fertilizers and bidding for Government tenders, including one trader (*ETG*), two regional fertilizer companies (*Premium Brands*, *MEA*) and one international fertilizer company (*Yara*). Currently only two of these players (*ETG* and *Yara*) have a local presence

40 This approach was adopted in the recent *infoDev* report on Tanzania's Agriculture Innovation Center, which identified “five key sub-sectors and value chains (or value chain groupings)” of potential interest (cashew nuts, horticulture, beef, sunflower oil, and cassava). See *infoDev*, *Creating Jobs through Agribusiness Innovation: The Agribusiness Innovation Center (AIC) of Tanzania*, draft for internal review, September 25, 2012, page 30.

41 *Annual Review of the African Enterprise Challenge Fund* (February 2012).

and there is no domestic production of fertilizer. The Tanzania seed market is outdone by a few large-scale international and regional players, such as *Cargill*, *Monsanto*, *Pannar*, and *SeedCo*, and local players, such as *Suba Agro Trading* and *Zanobia Seeds*, are struggling to come to the fore and to date remain limited in size and number. As of 2010, there were 34 registered seed merchants in Tanzania, 12 of which are producing certified seed. Despite the small number of players, this segment looks interesting in light of two positive developments. First, a **variety of government and donor-supported initiatives are being set up with the aim to strengthen the domestic private sector**. For instance, the landscape of the Rwanda fertilizer industry is about to change considerably, as the government is currently seeking to transfer responsibility for fertilizer procurement and import to the local private sector,⁴² while several initiatives are ongoing with the aim to support the establishment of small-scale seed producers in the region. Secondly, given agro-dealers' growing involvement in research to test new varieties of seeds and fertilizers, to guarantee best product application and performance, the **innovative component of this segment looks largely granted**.⁴³

The **agro-processing segment is highly fragmented**, comprising several transformation processes, from edible oil extraction to fruit and vegetable processing, from grain milling to dairy processing. Irrespective of the subsegment, agro-processing companies represent a diversified lot, going from small-scale cottage-level processors to vertically integrated multinational companies. A few multinational and large-scale processing companies typically dominate the formal markets, but medium- and small-scale companies are also in to largely tap the demand from local markets. In

42 To this aim, and with support from USAID and the International Fertilizer Development Center (IFDC), it is implementing the Privatization of Rwanda's Fertilizer Import and Distribution System (PReFER) program, tasked with creating a strategy and schedule for privatization as well as the development of a Fertilizer Business Incubation Center.

43 Such an opinion is largely confirmed by a recent study on private investment in agricultural research, indicating that: "The most common type of firms reporting innovations were seed firms that imported or bred new plant varieties, followed by firms in the pesticide or processing industries." For more information, see C. Pray, D. Gisselquist, and L. Nagarajan, "Private Investment in Agricultural Research and Technology Transfer in Africa." Conference Working Paper 13, prepared for the ASTI/IFPRI-FARA Conference, Accra, Ghana, December 2011.

the region, the **number of formal food-processing enterprises goes from less than 50 in Rwanda**, including a handful of large-scale operators and some 40 SME, **up to several hundreds in larger countries** (according to the *Ethiopian Investment Agency*, there were more than 800 agro-processing projects in operation in Ethiopia at the beginning of 2012). Besides, **thousands of micro and small informal businesses operate in the food-processing area**, using labor-intensive and poor technologies to provide traditional products (for instance, based on the findings of a large-scale agriculture survey conducted in Tanzania, over 8,000 processors had an income of at least \$1,500 per year from agribusiness⁴⁴). Opposite to the previous segment, the potential basin of interesting ventures is very large in agro-processing. However, as stated above, the actual innovation content of many formal enterprises, let alone informal ones, remains to be ascertained, and **the number of truly innovative projects is likely to represent only a tiny fraction of the total number of agro-processors in operation**.

The range of agribusiness support industries and services is extremely wide, going from quality control and food safety management systems to packaging and logistics services. The crucial role of these support activities to increase the competitiveness and the added value of agro-processors is widely acknowledged regionwide, where most of the small-scale processors cannot afford to sell their products beyond their immediate surroundings, due to high transportation and marketing costs, poor packaging, and limited value addition. Significant opportunities exist for some of these products to appeal to a much wider consumer base, both locally and abroad, provided that they are packaged correctly and product quality improves. Therefore, the limited availability of appropriate (and affordable) **packaging materials, label printers, food additives, and preservatives**, hardly available on the local markets, represents an important constraint for agribusiness development. In a similar vein, **food quality certification** represents a precondition to reach overseas markets, and **R&D and innovation** in critical technology areas, such as novel process development in preservation and storage techniques as well as in process control, among others, is very important to ensure sustainable growth in the food industry. Finally, sector

44 AgFims 2011: Agriculture Finance Market Scoping Survey.

competitiveness could significantly benefit from improvements in **logistics and supply chain management systems**, going from cold chain distribution and storage of pasteurized and fermented dairy products, meat and fish, to ICT applications enabling to reduce coordination costs and a better dissemination of information on pricing and market demand. Despite the peculiar definition of this segment, spanning several different industries and services, **the number of projects of potential interests is likely to be rather limited, possibly around a dozen in each of the countries considered. However, there is no doubt about this segment's innovation content and potential to boost the competitiveness of the local industry.**

Climate Technology Sector. As indicated in a recent *infoDev* publication,⁴⁵ this sector includes firms active in two main areas: (i) mitigation activities (meaning the reduction of GHG emissions from energy production, industrial processes, transport, agriculture, deforestation, and so on), and (ii) adaptation activities (including the development of technologies to help cope with climate impacts, such as water conservation, crop development, infrastructure reinforcement, and disaster management). Actions can take place in agriculture (for example, drip irrigation, resilient crops and seeds) and/or often involve the utilization of ICT (for example, systems to monitor GHG emissions), thereby overlapping with the above two sectors. The **cross-cutting nature of climate technologies also makes it impossible to arrive at a comprehensive quantification of the operations and operators involved in this sector.** For the purpose of the Study, four segments are analyzed: (i) mini-grid power systems, (ii) off-grid stand-alone systems and equipment, (iii) energy-efficient technologies, and (iv) biogas technologies.

The actual number of private entrepreneurs operating mini-grids (that is, with an installed capacity between 100 and 1,000 kW) **for energy services and/or productive uses is limited in the region.** Tens of pico- and micro-hydropower schemes (up to 100 kW) are currently in operations throughout the region. Typically established with the support of national governments and donor/NGO programs and managed as community-based organizations, they recently recorded

45 See *infoDev, Climate Innovation Centers: A New Way to Foster Climate Technologies in the Developing World*, by Ambuj Sagar and Bloomberg New Energy Finance (Washington, DC: World Bank, October 2010).

increasing private sector involvement: in Rwanda there are at least seven private site developers who have realized around 30 pico-hydro plants in recent years.⁴⁶ The number of mini-hydro power plants fully developed and operated by private companies is significantly smaller. In Rwanda, there are only a couple of such schemes (*Murunda* and *Rushaki*, with an installed capacity of 100 kW and 400 kW, respectively); in Uganda, meanwhile, comparable schemes are seemingly not at work yet.⁴⁷ At the same time, more and more **efforts are being put regionwide to increase private sector participation.** For instance, the government of Rwanda aims at mobilizing private sector investment in 20 mini-hydropower projects (totaling 9 MW) with bidders competing for four different “bundles.”

In largely dispersed, rural households, where the setup of grid systems is precluded by an excessively low density of population, off-grid technologies, such as solar home systems and solar lamps, represent an alternative solution for lighting and powering mobile chargers, radios/TV, and other electric appliances. **Again, the number of businesses involved in the assembly, import, retail, and installation of off-grid, clean energy equipment in the region is rather limited, possibly between 10 and 20 in each of the countries considered.** A recent study reports on Rwanda's 10 major players in this industry segment, which appear to be active in commercial household products, alongside a few highly specialized start-ups with international backing and broader retailers that deal with solar products as a side business.⁴⁸ In Ethiopia, the number of photovoltaic equipment suppliers is set at about 15, with 5 to 6 companies accounting for a market share of 90 percent.

Similarly, **the number of formally established enterprises currently operational in medium-scale production, installation, and distribution of energy-efficient technologies**—such as manufacturers and/or suppliers of efficient cook

46 T. Meier and G. Fischer, *Assessment of Pico and Micro-Hydropower Market in Rwanda* (London: GVEP International, December 2011).

47 Out of more than 20 power project sites cleared by the Electricity Regulatory Authority, only a handful number had feasibility studies done, such as *Ririma* (1.5 MW) in Kapchorwa, and *Tokwe* (0.4 MW) and *Ngiti* (0.15 MW) in Bundibugwo.

48 D. Disch and J. Bronckaers, *An Analysis of the Off-Grid Lighting Market in Rwanda: Sales, Distribution and Marketing* (London: GVEP International, July 2012).

stoves, clean fuel briquettes, and biogas systems—**is still rather limited.** Besides hundreds of micro energy entrepreneurs operating informally, only a few medium-scale businesses have taken off in the covered countries: one company has been identified in Tanzania (*EA Briquette Company*) and another in Uganda (*KJS*); typically, such a company produces more than 200 tons of briquettes a year from a dedicated factory. Finally, biogas has been primarily generated in small and very small installations, providing household energy or supplying gas as fuel for cooking, heating, and lighting to institutional customers, such as schools and clinics. With GTZ (now GIZ) support, Tanzania-based CARMATEC has installed more than 1,000 small and medium-size plants since the early 1980s, and many more are being constructed under the Africa Biogas Partnership Programme (ABPP).⁴⁹ Vice versa, **the construction of larger, commercial biogas plants as well as the utilization of biogas technologies for biomethane production for various fuel applications is lagging behind.** In spite of anecdotal evidence of positive outcomes, it remains to be seen whether the potential of biogas technologies can effectively and consistently be seized across the region.⁵⁰

3.3 Financing Needs: ICT Sector

As illustrated in the above section, the large majority of investment opportunities are in the **software segment**, broadly defined to encompass software development, planning, and design of business solutions (such as CRM and ERP), as well as new media and e-commerce (that is, web applications, content management solutions, e-transaction solutions, and web design). Irrespective of the specific subsegment

or business line of operation, the financing needs voiced by software ventures (as well as by their business associations and incubators) can be grouped into two ranges depending upon the business stage of development. On one hand, **seed stage ventures need between \$5,000 and \$10,000 to cover expenses for the conception and testing of the business ideas.** On the other hand, comparatively **more established enterprises usually seek between \$20,000 and \$100,000 to support increasing working capital requirements, R&D, and product development** (purchase of licenses, software, and so forth). In the case of **call centers/BPO services, financing needs are significant, going from \$100,000 to \$200,000 to scale up small operations, up to over \$500,000 for the setup of brand-new, medium-size initiatives.** What follows are some illustrative examples of financing needs voiced by firms active in the software segment (at seed and start-up/development stage) and in the BPO segment.

Software Ventures: Seed Stage. Addis Ababa-based *North 45*, an established new media business with eight full-time staff providing, among other things, web design and content development services, indicated \$6,000 as an adequate capital amount to kick-start similar entrepreneurial initiatives. Similarly, based on his long-standing experience with software business incubation programs at the Ugandan *Makerere University*, Mr. Niyitegeka set at between \$5,000 and \$10,000 the initial financing requirement of young developers of different software solutions, such as examination and coursework e-tutoring services, intercity bus travel search, SMS-booking, mobile web or mobile/web trading system for agricultural products. A similar financing range was also reported by the manager of *Outbox*, a Ugandan acceleration program for promising mobile and web start-ups.

Software Ventures: Start-Up/Development Stage. A software developer incubated at DTBi, *Dayone Softcom*, reported a need of \$20,000, primarily to cover some running costs (advanced software development tools and fast Internet connection) and to ease the participation in public tenders, currently constrained by the security bonds requirement. In Rwanda, the management of *Umuseke*, a recent tech start-up providing a diversified range of services, from software development to the hosting of a popular news website, reportedly needs some \$30,000 to support market development (hiring qualified

49 ABPP sees the partnership of Hivos and SNV backing national programs in six African countries, fostering the use of biogas for household energy. The program seeks to construct 70,000 biogas plants in Ethiopia, Kenya, Tanzania, Uganda, Senegal, and Burkina Faso, and is financed by the Directorate General for International Cooperation (DGIS) of the Netherlands Ministry of Foreign Affairs and SNV.

50 In Tanzania, a pilot project managed and partly financed by UNIDO, named Cleaner Integral Utilisation of Sisal Waste for Biogas and Biofertilisers, involved a biogas pilot plant at the Hale Sisal Estate in the Tanga region. A pilot showed positive signs that sisal residuals could constitute a layer conducive to anaerobic digestion, thus generating gas, electricity, and biofertilizer. However, the test was not followed by a second and third round of plant development, as originally planned.

employees, marketing initiatives, and outsourcing part of its services). A slightly higher amount, in the region of \$50,000, is currently sought for product development (that is, purchase of software for mobile apps development), working capital, and marketing efforts by *Go Ltd.*, a technological business set-up in 2011, involved in website applications development, web updating and content provision as well as other IT services. Somewhat higher was the size of the bank loan (\$63,000) secured by the Dar es Salaam-based *Blackmark Corporation*, a company specialized in the development of education management solutions, to meet working capital and equipment purchase needs tied to a specific deal, that is, the execution of a government procurement contract. Businesses requiring \$100,000 and above, as exemplified by Dar es Salaam-based *Bongo Live!* (see box 3.1), represent the exception rather than the rule. Notably, higher financing needs are associated with attempts to scale up business and to penetrate foreign markets. Figures from fieldwork interviews look largely consistent with the findings from secondary sources. In particular, the Capital Markets Authority's report estimates the level of project costs for the majority of investment opportunities in the software segment in Rwanda and Tanzania at between \$50,000 and \$150,000.⁵¹

51 Capital Markets Authority, *Impact Investing: Challenges and Opportunities in the East Africa ICT Sector* (Nairobi, 2010).

Call Centers/BPO Services. In the information provided in the course of its campaign to foster investment in Kigali-based BPO companies, the *Rwanda Development Board* estimates the costs of setting up a BPO business at about \$530,000. These would be primarily associated with the purchase of workstations and telecom equipment and the recruitment and training of personnel. Smaller costs are typically associated to the expansion of already existing operations, as indicated by a Ugandan operator, which is currently looking for \$160,000 to double the number of seats of its small, 10-seat call center. Again, these figures are largely aligned to project profiles depicted in the Capital Markets Authority report, setting the amount required to expand current facilities of a small Tanzania IP-based call center at between \$100,000 and \$200,000.

3.4 Financing Needs: Innovative Agribusiness

The agribusiness value chain encompasses varying scales of operation and investment, ranging from a few thousand dollars to multimillion-dollar ventures, operating in specific sectoral segments along all the steps of the value chain. Accordingly, the financing needs voiced by East African businesses reflect such a diverse nature of the sector, and the **amounts sought by the companies vary significantly, going from as low as \$20,000 to scale up operations of small**

BOX 3.1: *Bongo Live!*: The High-End Financing Needs of an ICT Gazelle Are Left Unsatisfied

Established in late 2010, *Bongo Live!* came to the forefront in *Forbes Africa* magazine as a Top 20 technology start-up company in Africa. It is a Dar es Salaam-based advertising and mobile services company that has subscribers and vendors, both large and small (including individuals to boutiques and banks), as its customers. Subscribers opt in to receive advertising specials based on their interests, such as coupons and special offers. CEO Taha Jiwaji recounts the story behind the company's establishment: "Our family computer business couldn't find an effective way to market our goods. I explored the issue and found that this was a common problem faced by vendors. So we developed this service that would let businesses reach consumers whilst not spamming people with junk SMS."

The company started with an **initial capital of \$10,000**, all personal savings, used mostly for marketing, accessing the right technology, and hosting services. The first year of operations was tough, but by the end of the second year, the company had managed to almost triple its first. *Bongo Live!* currently employs four full-time and three part-time staff and faces a **financing need of between \$100,000 and \$300,000** for a variety of purposes, especially product development, talent acquisition (new qualified staff), and for business development to market the company beyond Tanzania. The company is not seeking loan money; the banking conditions are unattractive and the business is still fluctuating, lending itself to financial uncertainty. The company has approached venture capital (VC), but most seem to have a reason to not get involved ("either we hear there isn't enough traction, that the market is saturated, or that the market isn't ripe yet."). So, for now, *Bongo Live!* will continue business with its own funding while it will also try to obtain additional funding from family and friends; additionally, the TANZICT Innovation Fund is about to grant them \$10,000 (the maximum a company can obtain from the fund).

processors to \$1 million growth capital to fund major expansions (equipment purchases, setting up new facilities, sales and marketing initiatives) of medium-size operators. However, financing needs above \$500,000, typically sought by large operators, deserve some qualifications. First, the financing shortage of such businesses is less severe than faced by their smaller counterparts, given that the large players are likely to access bank loans without major difficulties. Second, some of these operators have already received or are liable to receiving financial support from several sources.⁵² What this possibly suggests is that investment opportunities of this size are not so many and/or that fund providers adopt a rather conservative approach, tending to favor investment in well-known businesses when sizable amounts are at stake. The financing needs that were voiced by companies active in the three main segments can be summarized as follows.

Agro-Dealers. Specifically looking at more innovative businesses, funds needed to cover R&D, running costs (for example, registration, safety testing), and commercialization efforts associated with the launch of new agro-inputs are typically in the \$200,000–\$400,000 range. For instance, *Kenya Biologics Limited* has been awarded a \$290,000 grant by the AECF to register and produce biological insecticides against three key pest species on vegetables crops. In the case of investment projects aimed at supporting the expansion of the production capacity and/or the distribution network of agro-dealers, financing needs can easily increase to \$1 million. *Green Belt Fertilizer*, another AECF investee, obtained \$900,000 (out of a total project value of almost \$3 million) to install a state-of-the-art blending plant in Dar es Salaam. According to USAID, the establishment of a fertilizer import and distribution business aimed at exploiting the

impending privatization of the Rwandan market with potential annual sales of 14,000 MT would require an overall investment of \$1.2 million, primarily to fund working capital requirements and early stage operational losses.⁵³

Agro-Processing Companies. In line with the highly diversified nature of operators in this segment, different levels of financing needs are on display. First, start-up funds needed by small-scale processors to scale up operations and/or introduce more sophisticated technologies and/or improve quality standards and product ranges can be set in the \$20,000–\$200,000 range. For instance, a current TEMDO incubatee (*Arusha Women Entrepreneur*) producing organic peanut butter is looking for \$20,000 in funding to purchase new machines and to develop new marketing strategies to expand and diversify production. Similarly, the soon-to-be *infoDev*-backed Agribusiness Innovation Center in Tanzania expects to support diverse small-scale processors with capital needs in the \$20,000–\$100,000 range.⁵⁴ Second, expansion funds sought by larger operations typically fall in the \$500,000–\$1 million range. A financing need of about \$600,000 was voiced by a producer of cosmetics enriched with 100 percent natural extracts in Uganda (*Amagara Skincare*), as illustrated in box 3.2. Similar values were typically disbursed by the AECF to agro-processing companies (for example, \$1 million given to Tanzanian *Export Trading Company* to support the setup of a pigeon pea processing factory). These needs in this order of magnitude are further confirmed by a recent review of the performance of the Ugandan *Agricultural Credit Facility*: despite the fact that a U Sh 2.1 billion (about \$700,000) ceiling was imposed on the amount that could be extended to any single borrower or group of related borrowers, in the end almost 70 percent of the credit disbursed has gone to large selected applicants who received loans of \$700,000 or above.⁵⁵ However, in line with the above observations on higher credit accessibility

52 A few examples of operators that received multiple financial support are as follows: (i) *Africado*, a Tanzania avocado exporter; in its initial phase, it received \$900,000 in start-up capital from AAC, and was recently granted \$977,000 by the AECF to scale up a pilot outgrower scheme and construct a packhouse with oil-pressing facilities; (ii) primary investors in *Agrica*, a leading rice producer in East Africa, are *Norfund*, *Capricorn Investment Group*, and AAC; additionally, *Agrica*'s subsidiary, *Kilombero Plantations Limited*, recently obtained an AECF grant of about \$650,000; and (iii) the Rwanda-based agro-dealer *Forestry and Agricultural Investment Management Ltd.* received in 2010 a \$2 million loan from the *Overseas Private Investment Corporation* (OPIC), the U.S. DFI, and, more recently a \$750,000 grant from the AECF.

53 For more information, see USAID, *The Business Case for Investing in the Import and Distribution of Fertilizer in Rwanda*, May 2012.

54 See *infoDev*, *Creating Jobs through Agribusiness Innovation: The Agribusiness Innovation Center (AIC) of Tanzania*, 2012.

55 Set up in 2009 by the government in partnership with several financial intuitions, this facility aims at promoting the commercialization of agriculture through the provision of medium/long-term financing of capital investments in agriculture and agro-processing at interest rates below market level.

BOX 3.2: Amagara Skincare: A Medium-Size Operator Affected More by the “Cost” Than by the “Accessibility” of Finance

Established in 2011, Amagara is active in the **production of cosmetics enriched with 100 percent natural extracts, notably fruits, vegetables, and herbs** (for example, rosemary, peppermint, and thyme). The firm reproduces the Body Shop concept, already popular in Europe and the United States, a brand associated with 100 percent natural products from plant extracts and essential oils. Amagara (which means “life” in the local language) purchases all raw materials in Uganda, thereby constituting an interesting source of income for local farmers. Majority-owned by prominent figures in the Ugandan business community, Amagara received from its founders about **\$420,000 in initial capital**. Commercialization of the company’s products started in the fall of 2012, with **turnover by the end of the first year projected at \$310,000**. Amagara products are currently on sale in supermarkets and distributed to some hotel chains.

Amagara is planning to scale up operations, to expand retail and bulk sales (negotiations are ongoing with well-known hospitality chains and fitness centers). However, expansion would require substantial investment to move away from slow manual processes to *“intelligent, high-quality and precise manufacturing.”* Accordingly, it would **need an additional \$560,000**, mostly to purchase new equipment and partly to expand warehouse and cooling facilities. The management considered applying for a medium-term bank loan (five years), but the conditions offered were not advantageous (interest rate in the region of 24–26 percent) and requiring a higher interest rate of return (IRR) than the company can afford at this stage. Amagara’s **most pressing issue is not so much access to finance, but rather the cost of financing**. Therefore, the company is currently looking for investors and is open to consider equity financing. However, as it is unlikely that a commercially oriented investor would accept a remuneration lower than the interest charged by banks, some form of “patient” investor, with a long-term vision would be required.

by large borrowers, the review of the facility casts some doubts about the added value of the initiative, indicating that *“Many of these borrowers, who have benefited from the low market interest rates available under the ACF, could probably have afforded to pay market interest rates for the investments.”*⁵⁶

Supporting Services and Industries. Consistent with the cross-cutting nature of this sector, the amounts sought by these companies fall within a rather large range, from \$100,000 to \$800,000. On the lower side of the range, African Agricultural Capital invested \$120,000 to scale up an agricultural certification company, Africert. Higher-end amounts, in the region of \$500,000 and higher, were provided by the AECF in support of established businesses, to enhance production and distribution facilities and to extend the business lines of beneficiary companies. For instance, Brentec Vaccines Limited, a UIRI-incubatee, got \$600,000 to fund the development of a distribution system to increase the uptake of vaccines among owners of indigenous chickens. A higher sum, \$750,000, was granted to Virtual City, a company

specialized in the development, customization and implementation of innovative mobility solutions, to automate the dairy supply chain for smallholder farmers.

3.5 Financing Needs: Climate Technology Sector

The financing needs voiced by climate technology enterprises reflect the diverse nature of the sector, which encompasses different technologies, energy sources, and applications. **The amounts sought by companies vary accordingly, ranging from less than \$50,000 for setting up a pico-hydropower scheme to the \$100,000–\$300,000 range to create or expand medium-scale operations of both off-grid electricity and energy-efficient technologies providers. More sizable amounts are required for the construction of pilot biogas facilities, above \$700,000.** More specifically, firms active in different subsectors are faced with distinctive classes of needs (in terms of both quantity and quality), as portrayed below.

Mini-Grid Power Systems (Hydropower). In pico- and micro-hydropower schemes, investment costs are typically between \$2,000 and \$5,000 per kW, with an initial capital requirement rarely exceeding

⁵⁶ For more information, see Bank of Uganda and the Plan for Modernisation of Agriculture Secretariat, *Agricultural Finance Yearbook 2011: Coping with Economic Realities* (Kampala: GIZ, 2012).

BOX 3.3: Power Electronics and Control: An Operator with Financing Constraints Only Partly Mitigated by a Clean Tech Support Program

Power Electronics and Control (PET) was established in 2007, with an **initial capital of \$3,000**, entirely provided by its founder. It is active in the design, production, and installation of clean energy equipment in rural areas, such as solar panels, wind turbines, and micro-hydroelectric generators. The main product line is wind turbines with a generation capacity of 1,000 W to 5,000 W to power various machines such as refrigerators, water pumps, and small motors of rural households and businesses. PET joined the SIDO incubation program in 2007 and graduated three years later. Soon after joining the program, PET received a \$1,500 soft loan from SIDO. In addition, in 2010 SIDO introduced PET to the Tanzania Rural Electrification Agency (TAREA), through which it obtained grant funding. PET is still located on SIDO's premises, where it has access to workshop space and other facilities. PET employs six full-time and one part-time staff and the **annual turnover amounts to \$150,000**.

The firm's performance is positive, and the demand for its services high. PET is not always able to meet with increasing demand for its products, due to capacity and financial constraints. To scale up its activities, it would need larger premises and additional equipment of a higher quality. Its **financing needs are declared at about \$100,000**, over a period of three to five years. However, as the firm does not own any real estate, access to bank loans is likely to be difficult (and the amount of money sought is too small for being considered by any equity investor). Although the firm can generate some funds internally, production is liable to be slowed down due to the firm's inability to meet its financing needs.

the \$50,000 threshold. In larger initiatives, project costs are significantly higher. The overall investment foreseen by the government of Rwanda for setting up 20 mini-hydropower projects is between \$25 and \$30 million, with an average investment cost of \$1.25–\$1.5 million per scheme. In small-scale schemes, investment costs easily exceed \$4 million, as illustrated by a couple of initiatives being implemented in Tanzania. To set up the *Mbinga Mtambazi* hydropower scheme, with an installed capacity of 1 MW, aimed at serving 900 households in three off-grid villages, a private promoter, *Andoya Hydro Electric Company Ltd*, and the Rural Energy Agency (REA) are expected to inject over \$4 million.⁵⁷ *Tanzania Tea Packers (TATEPA) Ltd*. is considering a \$5 million investment to launch the *Suma Small Hydro Project*, a pioneering example of a small (1.5 MW), commercial installation providing power to the rural grid, as well as two TATEPA-owned firms.

Off-Grid Stand-Alone Systems and Equipment.

Financing needs of the few medium-scale operators active in the region typically fall in the \$100,000–\$300,000 range and are primarily aimed at supporting business expansion. The

management of a last-mile off-grid electricity provider interviewed during fieldwork in Tanzania, *Power Electronics and Controls*, said that the company is currently seeking an extra \$100,000 to move the production to larger premises, as well as for product development, marketing, and purchase of machinery and equipment (see box 3.3). After an initial \$50,000 working capital loan to acquire inventory, the Tanzanian *Zara Solar* received two more loans, cumulatively worth \$300,000, from *E+Co* to support business expansion. In the allegedly few instances of initiatives with a regional scope, financing needs can be considerably higher. This is the case, for instance, of *Nuru Energy*, which developed a unique model, based on the use of an off-grid recharging platform that employs human power to recharge *Nuru Energy's* portable modular LED lights and other low-power devices. Currently present in South Africa, Rwanda, Kenya, Uganda, and India, *Nuru Energy* received more than \$1 million from the AECF in 2011. However, it appears that such types of social impact initiatives benefit from donor support either in the founding phase and/or throughout implementation. Accordingly, besides being commercially financed by Bank of America Merrill Lynch, *Nuru Energy* was also seed-funded by the World Bank; similarly, Uganda-based *Solar Sister*, a social enterprise empowering rural women and fostering the use of solar energy in the region, could count on a \$2 million grant from USAID, giving the business a leeway of three years.

⁵⁷ REA will provide technical services and funds for the construction of plant civil works and electromechanical equipment under the off-grid component of the Tanzania Energy Development and Access Project (TEDAP) supported by the World Bank and Global Environment Facility.

Energy-Efficient Technologies. Leaving aside the hundreds of micro energy entrepreneurs operating informally, which need as low as \$200–\$1,000 to buy raw materials in bulk and to purchase vehicles for transporting products, financing needs voiced by the few medium-scale businesses can be assessed between \$50,000 and \$200,000. For instance, the start-up capital for setting up a briquette factory producing more than 200 tons of briquettes per year has been estimated between \$50,000 and \$100,000. However, it is worth noting, that given the strong “social” element of similar initiatives, major operations in both Tanzania and Uganda (EA Briquette Company and KJS) received financial support from various donors, such as DANIDA, the United States African Development Foundation, and USAID. In Ethiopia, the *Africa Briquette Factory*, a company producing biomass briquettes out of coffee parchments, is reportedly considering to scale up its operations, involving a \$150,000 investment in a second factory to start “in-house” processing of coffee parchments (an investment opportunity envisaged by *AgriVest SME Investment Facility*).

Biogas Technologies. Start-up costs of pilot initiatives aimed at producing upgraded biogas and/or biomethane are in the order of

\$700,000–\$800,000, mostly for the purchase of equipment. The Ethiopian *4R Energy* aims at developing the production of biomethane from the recycling of municipal sewage. The CEO estimated the initial financing needs to set up the pilot plant (with a capacity of 170–200 cubic meters of raw biogas per hour) and for working capital at about \$700,000, expected to be financed through a combination of debt (60 percent) and equity (40 percent). Rwanda’s *CRET* is looking for funding for its Kigali Biogas Bus project, concerning the establishment of an industrial biogas plant to provide fuel for the transport sector. The project requires an investment in the order of \$750,000–\$800,000, mostly for the building of biodigesters and the purchase of compression equipment. In larger operations, investment costs rapidly increase above \$3 million. In the medium term, *4R Energy* envisages the construction of a larger plant, with a capacity of 1,400–1,500 cubic meters per hour and including a biofertilizer plant. Total initial investment costs are estimated at about \$5.5 million. The *Rwanda Development Board* assesses at some \$3.2 million the amount required to set up a 5 MW biogas plant aimed at exploiting Kigali solid waste.

4 Conclusions and Recommendations

4.1 Introduction

This last section summarizes the key findings of the Study and presents some recommendations to address the problems identified. In particular, the key findings are presented in section 4.2, which elaborates on the **extent and severity of the financing gap**, both in general and in specific sectors/countries. Recommendations regarding **possible infoDev initiatives** are provided in section 4.3. Regarding this last aspect, the TOR call for the formulation of proposals for “one or two structures” that could be implemented by infoDev. In line with the draft nature of this Report, this section adopts a more exploratory approach and presents **a larger set of possible options** (and sub-options). At the same time, the analysis at this stage deliberately focuses **only on the key features of the various options**, without a full-fledged review of all the possible operational aspects. A more detailed analysis, including the governance and monitoring and evaluation aspects explicitly referred to in the TOR, will be presented in the Final Report, on the basis of the feedback provided by the Client.

4.2 Extent and Severity of the Financing Gap

Overview. The evidence presented in the previous sections definitely **confirms the existence of a significant financing gap for innovative MSME active in the target sectors**. However, this general conclusion is subject to two qualifications.

First, problems in accessing finance appear to be comparatively less severe for transactions exceeding the \$500,000 benchmark. Financing needs above this level are typically voiced by enterprises that have already been in operation for some time, and there are several sources of

funding that can be tapped. Obviously a positive reply is not guaranteed, but problems experienced are due more to the specific nature of the deals (some projects may well be not worth financing) than to “structural” constraints on the supply side. **Second**, in the case of innovative enterprises in the very early stages of development, including the bulk of those associated with business incubation programs, financing needs are often smaller than the \$50,000 constituting the lower bound of the range of financing transactions considered as a starting point for this Study. This is particularly the case for ventures in the ICT sector, where financing needs at the start-up stage rarely exceed \$20,000–\$30,000. Based on these considerations, **the range of financial transactions for which problems are experienced appears to be narrower than initially envisaged and, with some exceptions (for example, biogas generation; see below) concerns primarily transactions in the \$20,000–\$500,000 range.**

Financing Gap by Sector. The financing gap is comparatively more severe in the **ICT sector**. The amounts sought by innovative ICT firms are typically too small to constitute an attractive proposition for providers of risk capital. While transaction costs directly linked to the structuring of deals can (and indeed are) minimized through the use of quasi-equity instruments, fund managers receiving management fees in the order of 2.5–4 percent nonetheless see little interest in spending time on scouting and appraising (and, at a later stage, monitoring) excessively small deals. As for banks, in line with the findings of earlier studies, there are elements suggesting that the understanding of the ICT sector is improving and imaginative solutions to provide funding have at times been identified. However, these are only exceptions and the sector (in particular, the software segment) is still regarded as too risky by the generality of banks.

In **agribusiness**, the picture is more nuanced. On one hand, the volume of resources targeted at the financing of agribusiness initiatives has increased considerably over the last few years.

These funds are channeled through a battery of instruments (with dedicated investment funds, credit lines, challenge funds, guarantee schemes) that are potentially capable of covering the whole range of financing needs. On the other hand, the limited number of agribusiness incubation programs in activity inevitably reduces the pipeline of innovative ventures. In this respect, the overall limited degree of innovativeness of the projects funded by some existing facilities (for example, the AECF) and the presence of several “repeat beneficiaries” (that is, enterprises and projects that have received funding from more than one source) are indications that the number of well-deserving innovative initiatives may not be as large as envisaged. This is not to say that all the needs are adequately addressed, but overall the problem seems to be comparatively less acute.

Similar considerations apply to the **climate technology sector**. The growing emphasis placed on the development of renewable energy sources has attracted considerable attention from both commercial investors and donors/IFI, with an increase in the overall volume of funding potentially available. Moreover, the bulk of renewable energy initiatives (both off-grid and mini-grid solutions) have a strong “social” or “community” element that attracts grant funding (or other forms of subsidized financing), whereas the multitude of small-scale energy efficiency projects (from the reutilization of various types of waste for construction purposes to the manufacturing of a range of improved stoves) is a favorite target for philanthropic activities. However, as in the case of agribusiness, this does not mean that the financing gap has been bridged, and there are cases of companies that face difficulties in raising funds. In particular, problems are experienced by some medium sized initiatives, for example, biogas plants costing around \$500–\$700,000, although in this case the economics of the operations would require a deeper investigation, to ascertain their effective viability.

Financing Gap by Country. **Ethiopia** is the country with the most severe financing gap. The presence

of investment funds, currently at very modest levels, is expected to increase in the near future, but the focus of their activities is likely to be on relatively large operations, focused on established companies. In the banking sector, the relative importance of more dynamic private banks is also expected to increase, with more attention paid to the MSME segment. But persistent problems in the mobilization of resources (aggravated by the limited availability of IFI/donor credit lines) and the restrictive government policy (which forces banks to buy government bonds) are expected to remain major constraints to an increase in lending volumes. Overall, significant difficulties are found (and expected to persist) for the financing of innovative ventures in all the target sectors and for the wide range of transactions.

The situation is more favorable in **Uganda** and **Tanzania**. In both countries, the activities of investment funds are on the rise: Uganda is home to some indigenous initiatives (AACF, *Damascus*, and so on) while Tanzania is the main market of operations for *GroFin*, one of the key players in the region. Banks are also increasingly targeting the MSME market, with significant support from IFI/donor credit lines and/or credit guarantee schemes. Commercial sources of finance are complemented by several grant and soft lending schemes, which play an important role, especially in agribusiness and renewable energy (for example, the AECF has a dedicated window for Tanzania; both countries have large programs in rural energy development). While difficulties in accessing finance are certainly present and likely to persist, the financing gap appears to concern primarily transactions worth less than \$200,000–\$300,000 as well as ICT firms in general (but TANZICT’s *Innovation Fund* is expected to cover at least part of the financing needs for start-ups).

Rwanda is an intermediate situation. The country is increasingly attracting the attention of investment funds active at the regional level, but at the same time in-country presence is largely limited to the *Business Partners SME Fund*, with a capital of just \$8 million. In the banking

sector, lending volumes are expected to increase, partly thanks to the activism of the recently established BDF credit guarantee schemes, but significant efforts will be required to achieve the levels of Tanzania and Uganda. The Rwandan government is placing considerable emphasis on the development of certain lines of business, in particular ITES, and is certainly in the position of pushing banks in supporting new priority initiatives. But a similar interventionist stance cannot be expected to emerge for other innovative initiatives, which are likely to continue to face financing problems.

4.3 Recommendations for Possible *infoDev* Initiatives

A number of measures can be envisaged to address the financing gap issue. At this stage, four sets of possible *infoDev* interventions have been identified. Regarding the availability of risk capital, a first option consists in the **setting up of a new vehicle**, specifically targeted at providing early stage funding (seed and start-up) at innovative enterprises in the target sectors (Option 1). As an alternative to this high-profile/high-cost intervention, an increase in the funding potentially available to innovative firms could be sought through various forms of **cooperation with existing investment funds** (Option 2). In the area of bank lending, possible interventions include the **setting up of special credit guarantee mechanisms**, with the objective of increasing banker's risk tolerance (Option 3). The same objective could also be pursued through some "hybrid" intervention, involving the **setting up of a grant funding & guarantee scheme** (Option 4). The various options are described in the following paragraphs. As indicated above, at this stage the focus is on the features only, and a more detailed analysis will be incorporated in the Final Report based on the comments formulated by the Client regarding the preferred options.

Option 1: Setting Up a New Early Stage Investment Fund. Under this option, *infoDev* would promote the establishment of an investment fund aimed at providing early stage (seed and start-up) financing to innovative ventures in the target sectors. In order to achieve the required critical mass, the fund would be set up at the **regional level**, but, in order to be able to effectively serve its target market, it would require a permanent **presence at the country level** (in at least two

countries, ideally four). The fund would squarely target the financing gap identified, providing financing to ventures seeking between **\$20,000 and \$500,000**. In the case of smaller transactions (say, worth less than \$50,000–\$100,000), a special window, using streamlined procedures and standardized investment documentation, could be set up. Alternatively, a division of labor could be sought with some of the other interventions proposed here (see in particular Options 3 and 4). In a similar vein, **cooperation could be sought with existing investment funds or donor initiatives** in order to avoid a possible overlapping and/or to maximize synergies (for example, possible co-investment arrangements with funds providing a good coverage of certain countries or sectors). The fund would be able to use the **whole range of financial instruments**, equity, quasi-equity, and loans, taking into account the market conditions prevailing in the various countries as well as possible regulatory constraints (for example, only equity in Ethiopia). The fund would typically **provide financing in local currency**, which implies the need to set up a mechanism to hedge against currency fluctuations.

The target size of the fund can be determined based on the likely size of the pipeline but also taking into account cost-effectiveness considerations. At this stage of the analysis, assuming operating costs in the order of at least \$250,000 per year for a period of six years, **\$10 million** appears to be the minimum level of funding required to achieve a decent level of cost-effectiveness. This would allow the finalization of about 80 deals of variable size (including some 15 deals at \$300,000, 15 at \$100,000, and 50 at \$50,000), over an investment period of four years (that is, 20 deals per year).

From an organizational point of view, the fund would adopt the **two-tiered structure** typical for initiatives of this type, with an equity vehicle where the money is kept, the "fund proper," and a fund management company. Both the fund proper and the management company could be incorporated in a jurisdiction that meets basic international transparency standards while at the same time offering the opportunity to minimize the tax burden (Mauritius is a very popular location among the investment funds currently active in East Africa). The operational offices based in the various countries would be registered as consulting firms or nonbank financial institutions, in accordance with local legislation. In case funding is provided

by different typologies of investors, with different degrees of risk tolerance and/or more or less pronounced interest in financial returns, different classes of shares could be envisaged or different special purpose vehicles (SPV) could be set up. The SPV mechanism could also be useful in case investors have different geographical preferences (for example, one SPV could be used for investments in Tanzania, another for investments in Ethiopia, and so on).

The main drawback of this option lies, obviously, in its **complexity and high cost**. Apart from the time required for fund-raising (see below), the setting up of the fund would require long preparatory work, with a quite significant input from legal and financial advisers. Regarding costs, the nature and volume of the work to be carried out by the fund manager (the number of investments envisaged is three to four times bigger than the number of deals finalized by “standard” investment funds of comparable size) make the parameters typically used in the private equity industry (that is, management fees in the order of 2 to 3 percent) totally irrelevant and the cost structure of grant schemes such as the AECF (with 20 percent operational costs) appear as a more realistic benchmark.⁵⁸ An obvious implication of the above is that, in order to provide a commercial return to potential private investors, **the fund would have to rely on significant donor support, to cover for the bulk of operational expenses**. Regarding fund-raising, an interesting model is provided by the African Agricultural Capital Fund, whose capital combines capital contributions from private foundations (Rockefeller Foundation, Gatsby Foundation, and the Bill and Melinda Gates Foundation) with a subordinated loan from J.P. Morgan’s Social Finance Unit. In order to mitigate the risk, the latter is supported by a 50 percent guarantee extended by USAID.

Option 2: Cooperating with Existing Investment Funds. An obvious alternative to the establishment of a full-fledged *infoDev*-sponsored fund is to cooperate with existing investment funds. This option can be subdivided into two sub-options. The first involves the **participation, through a capital injection, in existing funds** (or in funds

⁵⁸ At this stage (and subject to a more refined analysis in case it is deemed useful by the Client), operational costs in the order of \$250,000 a year appear as the minimum amount required to run a multiregional operation, with permanent presence in two countries and frequent visits to the remaining two.

currently in the process of raising money) along with other investors. The second sub-option aims at **influencing the operating modalities of existing funds**, through the provision of incentives that could induce fund managers to pay more attention to innovative MSME in the target sectors. In particular:

- **Sub-Option 2A: Investment in Existing Funds.**

The participation in existing funds could take different forms. The most immediate route would be to invest in seed funds and/or in funds especially focused on the target sectors, so as to allow them to increase the number of potential deals and/or to broaden their area of operations to additional countries. However, the range of opportunities is fairly limited, as there are few seed/thematic funds and not all of them may be interested in having new investors on board and/or may display the necessary characteristics. For instance, *Savannah Fund*, the only ICT-dedicated fund focusing on seed and start-up financing, is currently still in the process of raising funds and, therefore, *prima facie* constitutes an interesting potential partner. However, the structure and management style of this fund are those typical of a private company (there are no separate legal vehicles for the fund and fund manager and there is no investment committee), and the founders/managers appear very skeptical about the role of IFIs/donors. A more forthcoming attitude can be reasonably expected in the case of *Persistent Energy Partners*, recently established as a result of the restructuring of *E+Co* and focusing on climate technology. However, precisely because of the problems experienced by the predecessor fund, the pros and cons of a possible investment would have to be considered in detail. As an alternative route, one may envisage the creation of special *infoDev*-financed/sponsored windows within funds that have a more general orientation. The feasibility of this option could be explored with the various generalist funds that are currently seeking new investors to reach first closing. In general, it is reasonable to expect that the level of interest would depend upon the volume of financing that *infoDev* could provide or, more likely, could help to mobilize.

- **Sub-Option 2B: Provision of Funding to Support Investments in Innovative MSME.** In this case, the objective would be to influence the “incentive set” faced by fund managers

in order to reduce their bias in favor of larger deals with established companies. This could be achieved through the mobilization of donor funds for the setting up of technical assistance facilities specifically targeted at supporting investments in firms displaying specific features (for example, investee having been in business for less than two years). Technical assistance (TA) money would be available to cover for the higher transaction costs associated with “non-mainstream” deals (including due diligence expenses and the cost of recruiting specialized advisory services) as well as to remunerate (based on agreed parameters) the “extra work” to be carried out by the fund managers, both in the investment and postinvestment phases. The lack of TA funds to support investment activities is a complaint frequently voiced by fund managers and, therefore, one could a priori expect a fairly forthcoming attitude from them. However, in commercially oriented funds, the general partners (that is, the investors in the funds) may well hold different views, fearing that the mechanism may distract fund managers from more profitable deals. This may limit the applicability of this option to the development-oriented funds. The size of the TA facility would depend upon the size of the fund, the operating conditions in the country(ies) of operation and the desired impact in terms of target number of investments in innovative MSME. At this stage, using the experience of Business Partners International as a benchmark, the size of a TA facility assisting a \$10 million fund can be envisaged to range between \$300,000 (the amount made available for the Rwanda Fund) and \$1 million (the amount sought in a proposed fund in Ethiopia).

Option 3: Setting Up Special Credit Guarantee Mechanisms. An *infoDev* intervention in this area would be aimed at providing comfort to banks so that they could consider in a more favorable light loan applications submitted by innovative firms in the target sectors. As the agribusiness sector is already fairly well served by existing credit guarantee schemes (CGSs), comparatively more emphasis could be placed on the ICT and climate technology activities. This option can be further subdivided into two sub-options, the first involving the creation of special windows within existing

generalist CGS, the second involving the setting up of mini guarantee facilities to be managed by business incubators.⁵⁹ In particular:

- **Sub-Option 3A: Creation of Special Innovation Windows within Existing CGSs.** This sub-option is conceptually similar to sub-option 2A illustrated above. At the regional level, the only potential counterpart is the recently established African Guarantee Fund (AGF), headquartered in Nairobi and expected to initially operate in Uganda and Tanzania. At the country level, possible counterparts include Rwanda’s Business Development Fund, Tanzania’s SME Credit Guarantee Scheme, and Uganda’s AgriBusiness Initiative (the last one, however, only focuses on agribusiness). In Ethiopia, the situation is more complex, as the existing schemes are run by regional governments, with federal authorities only playing a coordinating role. The main advantage of this sub-option lies in its very wide scope, as each CGS typically works with several banks, which would allow reaching a potentially large number of innovative MSME. However, there are also two significant drawbacks. First, the very notion of a dedicated guarantee window is largely in contrast with the principle of granularity (that is, the widest possible spreading of risks across different lines of business and firms typologies), whose respect is an essential condition for having a financially viable guarantee scheme. Overall, it is expected that a decent level of granularity could be achieved only if the special window were established at the regional level. Second, problems may emerge regarding the identification of eligible firms,

⁵⁹ The option of setting up a new, dedicated CGS at the regional level was also considered but discarded, as it would be exceedingly complex to put in place. For instance, lending decisions would still be made by banks operating at the national level, and this would require reaching agreements with a number of banks across the region. Furthermore, as credit guarantees play a useful role only to the extent that they can be regarded as a legitimate form of collateral in line with prevailing prudential regulations, extensive interactions would be necessary with the central banks in the four countries in order to clarify the risk-mitigating value of guarantees issued by the regional facility (and one can easily envisage the need for protracted negotiations, especially in the case of the National Bank of Ethiopia).

due to the inherent vagueness of the concept of innovation, and this may reduce the actual utilization of the facilities.⁶⁰

- **Sub-Option 3B: Setting Up Small Guarantee Facilities Anchored with Business Incubators.**

This sub-option aims at enhancing the capability of business incubators (and especially *infoDev*-supported incubators) of assisting their incubatees in accessing bank lending. In essence, it involves the provision of funds for the setting up of small credit guarantee facilities directly managed by business incubators, which would act as guarantors for loans extended to their incubatees. The scope of this intervention is obviously much smaller than in the previous sub-option, but at the same time the intervention would be much more focused on the target beneficiaries. This sub-option is inspired by a recent example in Tanzania, where COSTECH acted as guarantor toward the *Tanzania Investment Bank* for a loan extended to a DTBi incubatee (see section 2.5 above). While in that case COSTECH acted only as a “moral” guarantor, the availability of a guarantee facility would greatly increase the leverage of incubators in relation to banks and enhance their ability to assist their incubatees. The amounts required would depend upon (i) the degree of coverage to be offered to banks, and (ii) the modalities through which the credit guarantee is provided, but in general this can be regarded as a relatively low-cost intervention. In the case of a guarantee coverage of 50 percent (that is, in case of default the facility would cover losses up to 50 percent of the value of the loan), even assuming that the funds have to be deposited in the bank as cash collateral (which prevents any multiplicative effect), a facility with a capital

of \$200,000 could support at any point in time eight to ten incubatees (which is about half the size of incubation programs), each one borrowing some \$40,000–\$50,000.

Option 4: Setting Up a Grant and Guarantee Scheme. This option refers to a hybrid intervention, combining the provision of grant funding with the setting up of a credit guarantee mechanism. It borrows from the experience of the Business Plan Competition scheme implemented by the World Bank–funded Ethiopian Competitiveness Facility (see section 2.6 above). **Grant funding** would be provided to innovative enterprises selected through some type of competitive process, along the lines of classical competition grant schemes (for example, TANZICT’s Innovation Fund). However, the grant would not be disbursed directly to the beneficiaries, rather it would be used as **collateral for the provision of loans from banks**. The grant would be cashed by the winner only upon the full reimbursement of the loan, effectively becoming a reward not just for the quality of the business plan submitted at the competition but also for the actual behavior of the winner. Instead, in case of a default, the grant money would be seized by the bank in order to reduce the loss. The scale of the intervention is obviously rather modest (some 40 ventures were financed in Ethiopia), but the scheme offers multiple advantages, as it minimizes the negative “side effects” of grant funding (for example, risk of fostering/reinforcing a grant mentality) and helps in bridging the gulf between innovative MSME and financial institutions (in Ethiopia, the bank working with the program became familiar with new business ideas and the winners learned firsthand how to interact with banks). Compared with classical grant competition, the scheme can also be quite cost-effective, with the value of total funding mobilized being a multiple of the cost of grants. Assuming grants in the order of \$10,000 (the upper value currently considered by TANZICT) and a ratio of two to one between the grant used as collateral and the loan provided by the bank, the total funding received by the winners of the competition would be \$30,000, an amount that could meet the need of many innovative firms, especially in the ICT sector.

60 This problem has already been encountered in some EU-funded guarantee schemes for innovative enterprises in Europe. As “innovativeness” is difficult to define precisely, banks are reluctant to make use of these facilities because they are afraid that, in case of a default, the guarantor may regard the defaulting firm as not innovative, which would make the guarantee null and void. The system can only work if the guarantor *ex ante* approves each and every guarantee operation, but this inevitably increases transaction costs.

Annex A: List of Persons and Entities Interviewed

A.1 TANZANIA

Incubators and Other Support Structures

TEMDO Incubation Program (*infoDev*-supported incubator, Arusha)

- Mr. Sigisbert Mmasi, Incubator Coordinator

Small Industries Development Organization (SIDO) Incubator

- Mr. Emmanuel Saiguren, Incubator Coordinator

Dar Teknohama Business Incubation DTBi (*infoDev*-supported incubator, Dar es Salaam)

- Mr. George Mulamula, Chief Executive Officer

Kinu Hub (co-working and innovation space in ICT)

- Mr. Taha Jiwaji, Co-founder
- Mr. Jones Mrusha, Co-founder

Institute of Finance Management (training organization)

- Jim Yonazi, Director of Computer Services; Lecturer in e-Government

SEED (not-for-profit NGO promoting local entrepreneurship)

- Msafiri Chagama, Executive Director

Financial Sector

International Finance Corporation

- Mr. Dan Kasirye, Country Representative, Africa Department

InReturn Capital (impact fund)

- Mr. Ezra Musoke, Managing Partner (Tanzania office)

GroFin (SME financing fund)

- Mr. Emmanuel Elisante, General Manager, (Tanzania office)

Savannah Fund (focus on ICT)

- Mr. Mbwana Alliy, Co-founder and Managing Partner

African Enterprise Challenge Fund (focus on Agribusiness and Energy)

- Ms. Alexandra Mandelbaum, Country Representative (Tanzania office)

Tanzania Gatsby Trust (soft loans, agribusiness)

- Mr. Donald Gervas Sayi, Project Coordinator

Tanzania Investment Bank

- Mr. Benjamin Mazigo (Head of SME Lending & Leasing)

Access Bank

- Ms. Hedvig Sundberg, Credit Manager

Financial Sector Deepening Trust

- Mr. Sosthenes Kewe, Technical Director

Innovative Firms/Promoters

Women Entrepreneur Ltd. (Agribusiness—peanut butter processing)

- Mr. David Elias Mjuni, CEO

Dayone Softcom (ICT/ICTE—GIS applications)

- Mr. Vincent Kimaro CEO

Blackmark Corporation (ICT/ICTE—business communications)

- Mr. Guido Msita, CEO

Bongo Live! (ICT/ICTE—group SMS and opt-in advertising services)

- Taha Jiwaji, Founder

Power Electronics and Controls (Climate Technologies—windmill and hydropower)

- Mr. Kayungi Musa, CEO

Said Natural Products (Agribusiness—dye production from plants)

- Mr. Said, owner

Others

Tanzania Commission for Science and Technology (COSTECH)

- Mr. Hassan Mshinda, Director General

TANZICT (Finnish bilateral cooperation program in ICT/ICTE sector)

- Ms. Kristiina Lähde, Chief Technical Adviser

Institute of Management and Entrepreneurship Development (promoter of an angel investor network)

- Mr. Donath Olomi, CEO

A.2 UGANDA

Incubators and Other Support Structures

UIRI Incubation Program (infoDev-supported incubator, Kampala)

- Mr. Charles Kwesiga, Executive Director

HiveColab (co-working and incubation space)

- Ms. Barbara Birungi, Director

Makerere University Incubation Program (ICT/ICTE and business incubator)

- Mr. Hugh Cameron, Visiting Professor, Software Innovations and Business Incubation, Department of Networks, College of Computing and Information Services; MUSBI coordinator since 2010
- Mr. Michael Niyitegeka, Head of Corporate Relations Office, College of Computing and Information Services

Mara Launchpad (business incubation facility, no sector focus)

- Mr. Nigel Ball, Mara Foundation Director

Outbox (co-working and incubation space)

- Mr. Richard Zulu, Director

FinAfrica (business training and entrepreneurship nonprofit organization)

- Mr. Carmelo Cocuzza, Director

Financial Sector

International Finance Corporation

- Mr. Moses Kibirige, Senior Finance and Private Sector Specialist

MWH Trust (impact investment, Agribusiness)

- Mr. Theo de Groot

Kiva (crowdfunding platform)

- Ms. Laura Sellmansberger, Kiva Fellow

LGT Fund (venture philanthropy, grants, and quasi-equity)

- Mr. Samuel Collin Ssenyimba, Investment Manager, Africa

GroFin (Uganda office, equity and debt)

- Mr. Emmanuel Elisante, GroFin Tanzania, General Manager
- Mr. Daniel Bukenya Yiga, GroFin Uganda, Business Development Manager

Ascent Capital (equity investment fund in fund-raising phase)

- Mr. Lucas Kranck (Partner)

aBi Trust (focus on Agribusiness)

- Mr. Sam Kutosi, Financial Services Officer

Mara Fund (equity and convertible loans, generalist)

- Mr. Nigel Ball, Mara Foundation Director

- Mango Fund (small loans, considering equity)
- Mr. Sam Wheatley, Business Analyst

African Agricultural Capital Fund (loans and equity, Agribusiness)

- Mr. Tom Adlam, Managing Partner

Centenary Bank

- Mr. Abdul Kyanika Nsibambi, Manager Consumer Lending

DFCU Bank

- Mr. Juma Kisame, Managing Director

Damascus Fund (in the process of raising funds, will do small loans)

- Mr. Joe Kalema, Partner

Firms

@The HUB (creative and networking company)

- Ms. Jantien Zuurbier, Founder

Brudan (software development)

- Mr. Kevin Biretwa, Business Manager

WASH Reporter (IT-enabled reporting system)

- Mr. Daniel Nanghaka, Co-founder

Solar Sister (solar technology and community empowerment)

- Mr. David O'Connor, Program Director

Others

DBO International (key informants on equity and angel investments in Uganda)

- Mr. William Kalema, Managing Director, Uganda

Grameen Foundation AppLab (social enterprise incubator in the pipeline)

- Mr. Ravi Aggarwal, Innovation Manager

A.3 RWANDA

Incubators and Other Support Structures

KIST Incubation Program (*infoDev*-supported incubator, Kigali)

- Mr. Rajeev Aggarwal, Incubator Manager

KLab (ICT co-working and innovation space)

- Mr. Claude Migisha, General Manager Ag.

Masaka Business Incubation Centre (focus on Manufacturing and Agribusiness, not yet operational)

- Mr. Celestin Kabera, Innovation and Technology Support Senior Officer

Center for Business Solutions (business training and incubation)

- Mr. Rebson Dzala, General Manager

Integrated Polytechnic Regional Centre Incubation Program (focus on mechanical engineering)

- Mr. I-kabod Mwitende, Coordinator

Financial Sector

Enablis (entrepreneurship and business training center, promoter of credit guarantee scheme)

- Mr. John Ndikuwera, Country Manager

FINA Bank

- Ms. Grace Gaju, Business Manager

Rwanda Development Bank

- Mr. Francis Ndoli Karake, Head of Front Office and Payment Unit

Thousand Hills Venture Capital Fund (ICT focus, channeling U.S. investments)

- Antoine Bigirimana, Managing Partner

Business Partners International (Rwanda office)

- Eric Rutabana, Chief Investment Officer

Business Development Fund (public guarantee scheme)

- Mr. John Rutagengwa, Senior Investment Analyst
- Ms. Janet Kanyambo, Fund Manager

Bank of Kigali

- Mr. Lawson Naibo, Chief Operating Officer
- Mr. John Bugunya, Chief Finance Officer

Karisimbi Partners (business support and investment vehicle)

- Mr. Carter Crockett, Partner

Fusion Capital

- Ms. Grace Kajuju, Country Manager, Rwanda

Falcon Investments (newly established investment club, nearing business angel network status)

- Mr. Francis Mugisha, Partner

Firms

TorQue (software for bookkeeping and accounting)

- Mr. Jean Niyotwagira, CEO and Founder

Go Ltd. (mobile applications development)

- Mr. Emmanuel Hitimana, Partner

Gorilla Solution Technology Ltd. (website development)

- Mr. Jean Bosco Muhamyangabo, Co-founder

Construction & Renewable Energy Technologies (biogas production)

- Mr. Edouard Ndayisaba, Managing Director

Umuseke (software development, web design, IT consulting)

- Mr. Marcel Mutsindashyaka, Managing Director

Osca Connect (development of mobile solutions)

- Ms. Esther Kunda, CEO

Shaking Sun (website development, graphic design and computer animation)

- Ms. Akaliza Keza Gara, CEO

Others

Centre for Investment Development Enterprise (resource network to initiate investment in ICT)

- Mr. Peter Kimacia, Founder

Private Sector Federation, Chamber of Agriculture and Livestock

- Mr. Narcisse Ndagijimana, President

Private Sector Federation, Chamber of ICT

- Mr. Geoffrey Kayonga, Vice Chairman

Private Sector Federation, Chamber of Industry

- Ms. Chantal Umuraza Faure, Executive Director

Rwanda Development Board

- Ms. Christine Akuzwe, Division Manager in charge of Support Services

Ministry of Agriculture

- Mr. Jean Dieu Ntaganda, Market and Information for the Rural Sector Support Project (RSSP)

A.4 ETHIOPIA

Incubators and Other Support Structures

Iceaddis (ICT/ICTE and business incubation)

- Mr. Markos Lemma, Incubator Manager
- Ms. Sarah Yusuf, Incubator Manager

Manager of former Ethiopian ICT Development Agency (ICTAD)

- Mr. Tessema Geda, former ICTAD Manager

Manager of successor ICTAD incubator in Hawasa (SNNPR)

- Mr. Tadesse Tagele Abate, Incubator Manager

Financial Sector

International Finance Corporation

- Mr. Mamo Mihretu, Operation Officer

Access Capital

- Mr. Melaku Sahlu, Chief Operation Officer

Schulze Global Investment (first international private equity firm in the country)

- Ms. Berhane Demissie, Managing Director

Flow Equity (not incorporated as fund, but arranging funding on a case-by-case basis)

- Mr. Trent Koutsoubos, Partner

Empact Capital (currently raising capital)

- Mr. Michael Gizaw, Managing Partner
- Mr. Mesfin Tafesse, Partner and Legal Counsel

AgriVest SME Investment Facility (investment facility targeting investees in agribusiness and agriculture-related sectors)

- Mr. Nebil Kellow, Partner

Dashen Bank

- Mr. Asfaw Alemu, Vice President, Operations Management

Zemen Bank

- Mr. Helaway Tadesse, Vice President

Commercial Bank of Ethiopia

- Mr. Yehuala Gessesse, VP Credit Appraisal and Portfolio Management

Firms

eVentive (offshoring services, mobile money and technology solutions)

- Mr. Yemiru Chanyalew, President and CEO

Isaa Digital Studio and IT Solutions (movie production and basic ICT training)

- Mr. Israel, Owner

Hovis Computer Solutions Advanced (ICT training main business, graphics, and network solutions)

- Mr. Addis Alemayehu, Hardware Engineer

4R Energy (production of biomethane from sewage)

- Mr. Benjamin G. Sishuh, Founder

ETHAMCO (Agribusiness)

- Mr. Gashaw Kebede Daniel, Founder and CEO

North45 (communication/ "content creation" company)

- Mr. Khalid Abdullahi, Founder

African Bamboo (processing of bamboo wood, mainly for floorings)

- Mr. Khalid Duri, General Manager
- Ms. Sarah Kohls, Program Manager

VASA Engineering (e-business solutions, esp. Human Resources Management and Enterprise Resource planning software)

- Mr. Michael Girma, Co-founder

Others

Precise Consult

- Mr. Henock Assefa, Managing Partner

Ministry of ICT

- Mr. Yishak Amare, Private Sector Information Technology Senior Expert

ICT Sector Association

- Mr. Levi Girma, Vice President, Communication Sector Head

National Bank of Ethiopia

- Mr. Zeray Gebrewahid, Legal Expert

Ethiopian Investment Agency

- Mr. Girum Tadesse

Ethiopian Competitiveness Facility

- Mr. Aseged Assefa, Manager

KfW/Capital Links Fund Manager

- Ms. Hagera Mohammed, Fund Manager

Private Sector Development (PSD) Hub

- Mr. Hailemikael Liqu, Manager
- Mr. Bulti Terfasa, Senior Expert

Federal Micro and Small Enterprises Development Agency (FeMSEDA)

- Mr. Asfaw Abebe, Head of Training Department

Addis Ababa City Administration

- Mr. Solomon, ICT Senior Expert

YHM Consulting

- Mr. Yared Haile-Meskel, Managing Director

Annex B: Basic Features of Investment Funds⁶¹

⁶¹ Unless otherwise indicated, financial data refer to 2011.

Fund	Type	Year of Launch	Fund Size (US\$, millions)	Sources of Funds	Geographical Scope	Sector Focus	Financing Instruments	Range of Deals (US\$, thousands)
Acumen Fund	Impact fund, with focus on early stage and growth financing	2001	13	Foundations, private investors and philanthropists	Global (office in Kenya, also active in Uganda, Tanzania and Rwanda)	Generalist, welcoming investment in the agriculture and energy sectors	Debt (preferred), equity, quasi-equity	300–2,500 (average ~1,000)
African Agricultural Capital Fund	Commercially oriented, with focus on growth capital	2011	25	Foundations and long term loan (backed by USAID guarantee)	East Africa (office in Uganda)	Agribusiness	Debt, equity, and quasi-equity	250–2,500 (average > 1,000)
Business Partners International Rwanda SME Fund	Commercially oriented, with focus on growth capital	2011	8	Mainly institutional investors, DFIs, and foundations	Rwanda (office in Kigali)	Generalist, with some exclusions (e.g., mining)	Quasi-equity (preferred), equity, and debt	50–500 (average ~250)
Damascus Capital Growth Fund	Commercially oriented, with focus on growth capital	2013	30	Domestic institutional investors (pension schemes) and DFIs	Uganda (office in Kampala)	Generalist, preferring deals in fast-moving consumer goods, consumer staples, and special opportunities	Equity and quasi-equity	20–1,000
Empact Growth Fund	Commercially oriented, with focus on growth capital/late-stage financing	2013	50	Private investors, mostly from the U.S. diaspora	Ethiopia (office in Addis Ababa)	Generalist, preferring deals in the agribusiness sector	Equity	500–5,000
eVentures Africa Fund	Commercially oriented, with focus on growth capital	2010	28	Private investors	Sub-Saharan Africa (office in Kenya)	ICT sector	Equity	100–1,000 (average > 1,000)
Fanisi Venture Capital Fund	Commercially oriented, with focus on growth capital/late-stage financing	2010	50	Mostly DFIs	East Africa (office in Kenya, also active in Rwanda, Tanzania and Uganda)	Generalist, with some inclination for agribusiness	Equity	500–3,000

(continued)

<i>(continued)</i>									
Fund	Type	Year of Launch	Fund Size (US\$, millions)	Sources of Funds	Geographical Scope	Sector Focus	Financing Instruments	Range of Deals (US\$, thousands)	
Fusion African Access	Commercially oriented, with focus on growth capital and later-stage financing	2011	150	Institutional investors from Europe and Kenya	East Africa (office in Kenya, also active in Rwanda, Tanzania, and Uganda)	Generalist (long experience in real estate investment)	Debt (preferred), equity, and quasi-equity	250–5,000	
Grassroots Business Fund	Impact fund, with focus on growth financing	2008	47	Individual investors and organizations	Global (office in Kenya, also active in Tanzania)	Generalist, preferring deals in agribusiness and ICT sectors	Debt (preferred), equity, quasi-equity, and guarantees	500–1,500 (average ~1,000)	
GroFin Africa Fund	Commercially oriented, with focus on growth capital for existing businesses	2008	170	DFIs, institutional investors, and corporate foundations	Africa (offices in Kenya, Uganda, Tanzania, and Rwanda)	Generalist, with some exclusions (e.g., primary agriculture and trade)	Debt, quasi-equity, and rarely equity	50–1,000 (average ~300)	
InReturn East Africa Fund	Commercially oriented with a social impact requirement and focus on growth	2009	25	Private and institutional investors from the Netherlands	East Africa (office in Kenya and Tanzania, also active in Uganda)	Generalist, with some exclusions (e.g., high tech and primary agriculture)	Equity and quasi-equity	250–2,500 (average > 1,000)	
LGT Venture Philanthropy	Impact fund, with focus on early stage and growth financing	2007	..	Princely Family of Liechtenstein and other private investors	Global (office in Uganda, also active in Tanzania and Ethiopia)	Generalist (any sector, provided that investments yield social returns)	Debt, equity, quasi-equity and grants	300–1,000 (average ~700)	
Mango Fund	Impact, nonprofit fund, with focus on early stage and growth financing	2008	1	Individual investors	Uganda (with offices in Kampala and Arua)	Generalist (any sector, provided that investments yield social returns)	Debt and, in the future, equity	5–100 (average ~62)	

Fund	Type	Year of Launch	Fund Size (US\$, millions)	Sources of Funds	Geographical Scope	Sector Focus	Financing Instruments	Range of Deals (US\$, thousands)
Persistent Energy Partners	Impact, nonprofit fund, with focus on early stage and growth financing	2012	40	Mostly DFIs	Global (with office in Tanzania)	Climate technology	Debt (preferred) and equity	25-1,000 (average ~400)
Rift Valley SME Fund 1	Commercially oriented, with focus on growth capital and later-stage financing	2011	60	Institutional and private investors	Sub-Saharan Africa (offices in Ethiopia and Uganda; also active in Tanzania and Rwanda)	Generalist (but initially targeting catering, restoration, and clinical labs)	Equity	> 750 (average ~3,000)
Savannah Fund	Commercially oriented, with focus on seed and start-up capital	2012	10	Private investors	Sub-Saharan Africa (office in Kenya, also active in Tanzania)	ICT, targeting especially web and mobile start-ups	Equity	25-500
Schulze Global Ethiopia Growth and Transformation Fund I	Commercially oriented, with focus on growth capital and later-stage financing	2012	100	Institutional investors (with CDC as cornerstone investor)	Ethiopia (office in Addis Ababa)	Generalist	Equity	1,000-10,000
TBL Mirror Fund 2	Commercially oriented, with focus on early stage and growth financing	2012	50	Private investors from the Netherlands and Kenya	East Africa (office in Kenya)	Generalist, preferring deals in ICT, IT-enabled, and high-tech sectors	Equity and quasi-equity	100-1,000
Thousand Hills Venture Fund	Commercially oriented, with focus on growth capital	2004	..	Private investors from the United States	Rwanda	Generalist	Equity	100-600

Annex C: Profiles of Selected Investment Funds

African Agricultural Capital Fund	
Basic Features	
Nature and Status	The African Agricultural Capital Fund (AACF) is an impact fund, established in 2011 and managed by Pearl Capital Partners (PCP); the same fund manager was also in charge of administering AACF's predecessor fund, African Agricultural Capital (AAC), fully invested as of 2011, and is currently managing the African Seed Investment Fund (ASIF), launched in 2009 and with an expected 20-year life (see below for more details).
Geographical Coverage and Location	AACF targets investments in Kenya, Uganda, and Tanzania ; Kenya is expected to account for around 40 percent of investments, with Uganda and Tanzania accounting for 30 percent each. The fund manager is incorporated in Mauritius, with an adviser in Kampala named PCP Uganda.
Funding	AACF's total funding amounts to \$25 million collected through a single fund-raising round. Funding includes (i) capital contributions of \$17 million provided by development-oriented private organizations (Rockefeller Foundation, Gatsby Charitable Foundation, and Bill and Melinda Gates Foundation), and (ii) a \$8 million subordinated loan from J.P. Morgan's Social Finance Unit . J.P. Morgan's loan is supported by a 50 percent guarantee from USAID. The fund's life is 10 years , with an option to extend two years.
Investment Policy	
Investment Criteria and Guiding Principles	On the whole, AACF's investments must combine social impact and financial returns . The target return to investors is of approximately 15 percent per year. AACF covers early stage enterprises (even near start-ups), but is moving to invest increasingly into more established businesses as well. AACF has the primary purpose of making profitable investments in small and medium-size agribusinesses in Africa while creating significant positive social impact on smallholder farmers. Investee selection criteria are rather flexible: <i>minima</i> include that the investee has legal personality and that its business line is in connection with agriculture. As long as investees meet these requirements, all applications are considered.
Sector Focus	AACF is a specialist fund with an agribusiness focus ; investees' profiles cover the whole agribusiness value chain, from wholesalers (for example, seed sellers) to service companies (for example, Certification Institutes).
Size of Deals	AACF's original investment range was set at between \$200,000 and \$2 million . In practice, however, it is envisaged that the size of actual deals will be considerably higher, averaging \$2.5 million .
Financial Instruments	AACF uses a combination of equity, quasi-equity, equity-related, and debt investments . The choice of the specific instruments to be used depends on the investee's needs and on the level of risk shielding that is warranted by the investment.
Attitude toward Innovative Ventures	Innovation is not a key feature of AACF's investments. However, it is a welcome component whenever it does not impinge on the achievement of social or financial returns.

(continued)

African Agricultural Capital Fund *(continued)*

Operations

Portfolio and Pipeline

As of mid-2012, AACF had finalized two investments, a \$600,000 one in Kenya and another worth \$1.2 million in Uganda; two additional deals, of \$2.2 million and \$2.5 million, were under consideration by the Board at the time of research for this report.

Exits and Performance

No exits yet. In general, AACF expects to exit its deals after an investment period of between five and seven years.

Post-Investment Assistance

Under AACF, TA is provided to investees, according to their needs, through a **\$1.5 million USAID grant-funded facility**. This helps mitigate risk for all stakeholders (the investees, the fund manager, and the investors) by allocating resources to sustain investees' operations and improve their businesses' viability. PCP and the investee make a joint assessment of the TA needs of the latter, if any, and then assistance is provided accordingly. Assistance may include procuring agronomic or postharvest expertise, business and financial training, or inputs to help the investee adapt to the operating business environment.

Other Aspects

African Agricultural Capital (AAC). AACF is the successor fund to **AAC**. Established in 2005, AAC was originally endowed with **\$7 million** from the Gatsby Charitable Foundation, the Rockefeller Foundation, and Volksvermogen NV. Since 2005, the Gatsby Charitable Foundation provided a further **\$2 million** to the fund. Since its founding, **AAC** invested in early stage, growing businesses with the aim to "improve the livelihoods of smallholder farmers by investing in agricultural enterprises that provide improved access to goods, services, and markets." As of 2011, **AAC** had been **fully invested**. Since 2005, the investment range has typically been **between \$100,000 and \$1 million** per investment, targeting an **8 percent IRR**. The first investment was in the Kenyan Institute of Certification (AfriCert), amounting to \$120,000. The second one was in pest management in Kenya, \$200,000 in value. Across the whole fund, PCP has made a total of **16 investments, eight exits** on loans and straight equity investments, and with **five more exits scheduled** by June 2013.

African Seed Investment Fund (ASIF). **ASIF** was launched in 2009 with a total endowment of **\$12 million** provided by the **Alliance for a Green Revolution in Africa (AGRA)**. The fund is managed by PCP and was set up to provide risk capital to at least 20 small and medium-size seed companies in Sub-Saharan Africa, over a time span of 20 years. It is socially and commercially oriented, targeting reasonable financial returns alongside the achievement of far-reaching impact on over one million rural households. A total of \$1 million of this fund is earmarked for investments of **\$50,000–\$150,000** in small, early stage businesses, with the remainder intended for larger deals.

Investment Process. The fund management team is composed of a managing partner, three other partners and a four-strong investment team. The fund's investors and partners jointly established an Impact Committee for the review of potential deals, which is done in tandem with the Investment Committee and PCP. Deals are sourced through PCP's network and presentations to professional associations. Initially PCP tried to pitch with banks and the local aBi Trust as well, but these attempts did not meet with interest. When applications are received, the *Impact Committee* reviews scenarios of business growth, risks, projected smallholder farmer impact, and potential challenges to its ability to scale its engagement with smallholder farmers. The *Impact Committee* and *fund manager* then discuss the prospective investment and in due course address uncertainties around impact assumptions. If the investment has sufficient potential for social impact, the investment undergoes the financial due diligence and assessment of financial return potential. Ultimately the investment decision is made primarily on the basis of the investment's potential for **financial returns** and **social impact**.

Internal Constraints. PCP Uganda's team consists of seven staff, all based in Kampala. The size of the team limits the number of deals (around 15, at most) that can be handled. Additionally, PCP is unwilling to mobilize amounts below \$100,000 per investment, because costs would not be recovered.

Fund Manager's Remuneration. AACF applies a management fee of 2.5 percent, with 20 percent carried interest.

(continued)

African Agricultural Capital Fund *(continued)*

Sources

- Food and Agriculture Organization of the United Nations (FAO), "Agricultural Investment Funds for Developing Countries," 2010.
- Gatsby Charitable Foundation website, <http://www.gatsby.org.uk/en/Africa/Projects/Venture-Capital-for-African-Agriculture.aspx>.
- Global Impact Investment Network (GIIN), "Diverse Perspectives, Shared Objective: Collaborating to Form the African Agricultural Capital Fund," June 2012.
- J.P. Morgan, "A Portfolio Approach to Impact Investment," *Global Social Finance Research* series, October 2012.
- Pearl Capital Partners (PCP) and the Gatsby Charitable Foundation, "Impact Investment: Understanding Financial and Social Impact of Investments in East African Agricultural Businesses," 2011.
- Interview with Mr. Tom Adlam (Pearl Capital Partners, Managing Partner of African Agricultural Capital Fund).

Business Partners International (Rwanda) SME Fund

Basic Features

Nature and Status	BPI (Rwanda) SME Fund is a commercially oriented fund managed by Business Partners International (BPI). The Rwanda SME Fund was launched in 2011 and is currently in the investment phase.
Geographical Coverage and Location	The fund targets Rwanda deals only. The fund manager is the South Africa-based Business Partners International, operating through its Rwanda subsidiary (incorporated and based in Kigali).
Funding	The total fund size is \$8 million . The Rwanda Enterprise Investment Company (REIC) contributes 50 percent of the overall capital, with the other half provided by a consortium consisting of a Dutch development organization (Stichting Doen) and some development finance institutions (including EIB, IFC, CDC, and Norfund, with the IFC alone supplying \$1.6 million).

Investment Policy

Investment Criteria and Guiding Principles	Although formally open to start-ups, expansion, and distressed businesses, BPI looks primarily at the viability of the investee's business plan (therefore, established businesses are more likely to be considered than newcomers), as well as at their prospected social impact , understood in terms of job creation resulting out of the investment. The target rate of return is 22 percent.
Sector Focus	BPI's Rwanda Fund is a generalist fund , as reflected by its current portfolio (see below). However, there are sectors that are excluded a priori, such as primary agriculture, underground mining, nonprofit, and trade activities that involve no value addition or job creation.
Size of Deals	In principle, BPI's Rwanda Fund targets deals in the \$50,000–\$1 million range . However, deals so far realized have not exceeded \$500,000.
Financial Instruments	<p>BPI's Rwanda Fund makes use of debt, equity, or a combination of both; since inception, however, it has mainly used debt. In the case of equity, BPI takes up to a 45 percent stake. BPI favors revenue-sharing investments whereby investees give royalties whose size can vary, although it is always calculated as a percentage of the monthly revenues (for example, 0.5 percent of the investee's net monthly revenues).</p> <p>In the case of debt financing, collateral is preferred, but not required. That said, in BPI's view it is in the investee's interest to present some collateralized assets, since BPI's debt price is based on risk (and the lesser the collateral, the higher the risk). The interest rate charged by BPI is the base rate (16.5 percent), with a royalty addition (see above).</p> <p>Funding is typically provided in local currency.</p>
Attitude toward Innovative Ventures	Innovation is not among the fund's investment criteria, but is nonetheless welcome. Innovation is understood as enabling the provision of a product that would otherwise have to be imported, introducing the use of local resources/materials, technology transfer, and mitigation of environmental impact.

(continued)

Business Partners International (Rwanda) SME Fund *(continued)*

Operations

Portfolio and Pipeline	<p>Throughout its lifetime, the fund aims to finance up to 70 SME. Since its launch, BPI's Rwanda Fund has received and reviewed around 120 business plans submitted from businesses in a variety of sectors and maturity stages. It has approved nine investments, of which four have already been paid out for; disbursement is imminent also for the remaining five. The first investment was finalized in January 2012.</p> <p>The nine investments that were eventually approved are in three sectors: most are in manufacturing (construction materials, tissues, and embroidery), and the rest in construction and events management/tour operation. The nine deals vary in size, ranging from \$90,000 to about \$300,000, with an average of \$200,000. Of the nine investees, one has been in operations only for four months. In eight out of nine cases, BPI has used combinations of debt and royalty; the remaining deal is a combination of equity and debt.</p>
Exits and Performance	<p>No exit so far. The exit type is agreed in advance with the investee, and is typically configured as a buyback in five years' time (typical investment period). The valuation method is also determined in advance.</p> <p>For its debt products, BPI expects a payback of the principal in the form of monthly installments, with installment size and frequency depending on the investee's cash flows. The grace period goes up to two years.</p>
Post-Investment Assistance	<p>The fund has a dedicated \$300,000 TA facility from which investees can take interest-free loans to pay for the support of external consultants, preselected by BPI. The TA loan per investee is capped at 30 percent of the total investment size.</p>

Other Aspects

Investment Process. Overall, the application process may take two to three months. The Investment Committee, comprising four individuals, convenes at the most twice a month (via teleconference). Shareholders are allowed to participate in these meetings but hardly ever do so, in actual practice. The committee is composed of the Chief Investment Officer in Rwanda, the Chief of Operations in South Africa, the CEO of Business Partners Ltd., and one Executive Director.

Legal Aspects. The fund is registered in Rwanda as a private liability investment company. In Rwanda, there is no specific regulation for investment funds, whose activities are not subject to any prudential supervision. However, the Central Bank requested BPI to subscribe to the Credit Reference Bureau and the fund manager is required to send a monthly report if it engaged in operations during that month (deal finalization, disbursement, etc.); otherwise, the monthly report is not mandatory. Also, as in the case of any other foreign investor, BPI had to obtain a formal authorization (also from the Central Bank) for the repatriation of capital and profits. Overall, the procedure was quite fast and straightforward. This contrasts with BPI's experience in Mozambique, where BPI had been trying to set up an equivalent fund but eventually surrendered because the procedure was too cumbersome (in Mozambique, the fund would have been treated as a banking institution).

Fund Manager's Remuneration. Fund management arrangements include a management fee of "no less than 4 percent." BPI also takes a success fee on deals exceeding the target IRR of 22 percent. In the case of equity financing, a carried interest also applies.

Sources

- BPI website, <http://www.businesspartners.co.za/our-funds-investors/rwanda-sme-fund/>.
- B. Namata, "IFC to Increase Funds to Small Businesses," *The East African*, May 19, 2012.
- Press release for the launch of the fund and various other articles published in the East African press.
- Interview with Mr. Eric Rutabana (BPI Rwanda SME Fund, Chief Investment Officer).

Impact Growth Fund	
Basic Features	
Nature and Status	Impact Growth Fund (EGF) is a commercially oriented fund managed by Impact Capital Partners. The fund has an expected life of 10 years and is currently in the fund-raising phase, its launch expected in Q4 of 2013.
Geographical Coverage and Location	EGF will target initially investments in Ethiopia only, although later on it will also cover other East and south African countries. The fund will be located in the United States, with the local Impact Capital branch registered in Addis Ababa as a consulting company.
Funding	At final closing, EGF will have reached a total capital of \$50 million . It is expected that the main sponsors will be institutional investors (a fund of funds and social investors), development finance institutions , and some private investors . Most of them will be international investors.
Investment Policy	
Investment Criteria and Guiding Principles	The fund will provide SME with risk capital for expansion, change of control, and consolidations; it will only consider start-ups in exceptional circumstances. Its investments will combine financial and social returns . Beyond these, EGF will not have strict investment requirements, as long as the investee can present an accurate and duly filled private placement memorandum (PPM) and that the investee company is in line with Impact's investment orientation.
Sector Focus	EGF will be a generalist fund , with no specific sector orientation. On the whole, Impact will concentrate on industries well positioned for rapid expansion. These include primarily the agro-processing sector (some projects are already in the pipeline on the development of a cold chain of conservation and transportation for perishable horticultural goods), primary and secondary processing in the agricultural and dairy sectors, followed by fast-moving consumer goods (FMCG), leather, garments and textiles, construction materials, support services to infrastructure and energy, and general services.
Size of Deals	In principle, the expected investment range will be between \$500,000 and \$5 million . According to EGF's most recent projections, however, typical investments will be of the order of \$2–3 million.
Financial Instruments	EGF will make use of straight equity ; it will acquire significant minority and majority stakes in its portfolio companies. On occasion, it will also operate through local debt . Funding will typically be provided in local currency (the local debt part) and the rest in U.S. dollars .
Attitude toward Innovative Ventures	Innovation will not be crucial to EGF's portfolio, but it will occasionally be a welcome feature, if compatible with the rest of the fund's imperatives (that is, financial and developmental returns).
Operations	
Portfolio and Pipeline	The expected pipeline will consist of around 15 deals .
Exits and Performance	No exit so far.
Post-Investment Assistance	Ten percent of the EGF's capital will be used to set up a TA fund for investee capacity building, mostly at the level of internal governance, management, and operations.

(continued)

Impact Growth Fund *(continued)*

Other Aspects

Operational and Legal Aspects. EGF will be managed by Empact Capital Partners, a U.S.-incorporated investment advisory and management company; the Ethiopia office is registered as a branch of the U.S. firm. Being registered as an advisory company in Ethiopia, where the very concept of fund management is unknown, allows for greater operational flexibility while enabling Empact to comply with the existing legal parameters (as in the case of Schulze, as a foreign entity Empact is forbidden to engage in banking or financial activities, as per the Ethiopian revised investment code). At the same time, the fund will be located abroad (United States) and capital will be mobilized as needed, on an investment-by-investment basis, through the use of either offshore special purpose vehicles or by setting up a local company for the purpose.

Sources

- Empact website, <http://www.empactcapital.com/>.
- Interview with Mr. Michael Gizaw (Empact Capital, Managing Partner).
- Interview with Mr. Mesfin Tafesse (Empact Capital, Partner and Legal Counsel).

Fusion African Access

Basic Features

Nature and Status	Fusion African Access (FAA) is a commercially oriented fund and is managed by Fusion Capital Limited, the African investment arm of Fusion Investments, which is a finance group comprising companies specializing in SME, private equity, and private wealth management. FAA was established in 2011, although Fusion has been operating in Kenya since 2006.
Geographical Coverage and Location	FAA targets deals in Kenya, Uganda, Rwanda, Tanzania , and Burundi. Fusion Capital is incorporated in Guernsey (United Kingdom) and has subsidiary offices in Kenya, Rwanda, Tanzania (recently opened), and Uganda.
Funding	FAA's overall capital amounts to \$150 million . Its providers are a network of institutional investors from Europe and Kenya.

Investment Policy

Investment Criteria and Guiding Principles	In principle, FAA is ready to invest in start-up, mid- to late-stage SME, although it typically invests in businesses that have been in operations for at least two years. It provides patient capital to support long-term growth. The target return to investors is 25 percent per year. FAA's core investment objectives are financial returns and value addition . Fusion Capital tends to invest in companies demonstrating strong management capacity, or showcasing leadership teams that are ready to grow and boost their management skill sets.
Sector Focus	FAA is a generalist fund with no specific sector orientation. Before launching FAA, Fusion Capital had invested in Kenya in the real estate sector (including a private cemetery). Since its launch, FAA has provided capital primarily to investees in the agribusiness sector.
Size of Deals	In principle, FAA's investment size is in the \$100,000–\$4.5 million range , although, in practice, the range appears to be narrower, that is, \$500,000–\$2 million.

(continued)

Fusion African Access *(continued)*

<p>Financial Instruments</p>	<p>FAA deals typically combine equity and debt, with a preference for the latter; a typical investment is split between 20–40 percent equity and 60–80 percent debt. Debt instruments are tailored to the specific features of the transaction (for example, Property Development Finance, Contract/LPO Financing, SME Growth Loan, and so on).</p> <p>In the case of debt financing, collateral is required, although flexibility exists (as per FAA’s track record, if investee commitment is demonstrated, collateral coverage can be as low as 25 percent). Fusion invests in both local and hard currencies.</p>
<p>Attitude toward Innovative Ventures</p>	<p>Innovation is not crucial to FAA’s portfolio. Innovative investees are considered as long as they present complementary features of strong management, sustainability, and growth potential.</p>

Operations

<p>Portfolio and Pipeline</p>	<p>As of late 2012, FAA in Rwanda had made five deals, of which two in agribusiness (one mixed debt and equity, and one pure debt). It was also about to close three more deals (of which one is in ICT). No deal has been reached in Tanzania yet, given the local subsidiary’s recent opening.</p>
<p>Exits and Performance</p>	<p>No exits so far. Given the preponderance of debt financing, the typical exit route is through the repayment of loans. In the case of equity transactions, exit strategies will be preliminarily agreed upon with the investees.</p>
<p>Post-Investment Assistance</p>	<p>FAA adopts a hands-on approach to assist its investees; however, no special arrangements (for example, a separate facility) are in place further to the standard modes of TA delivery (that is, board participation).</p>

Other Aspects

Fusion Capital’s Earlier Operations in East Africa. Fusion started operating in Kenya in 2006, providing working capital loans to growing local SME. In 2010, the shareholders supplied additional capital to expand this activity, which turned into the smaller company-lending program, which is still under Fusion’s management. During this period, the company expanded its area of operations, opening new offices in Kigali, Rwanda, and Kampala, Uganda. In 2011, Fusion Capital Asset Management was created, followed by the opening of subsidiaries in Guernsey (United Kingdom) and in Kenya.

Investment Environment. Equity investments in the region are considered challenging in a number of respects. East African potential investees have a limited understanding of how equity investments work; furthermore, there is a “*focus problem*,” in the sense that an investee’s commitment tends to taper off soon after the capital is delivered.

Sources

- Fusion Capital website, www.fusioncapitalafrica.com.
- Press release for the launch of the fund and various articles published in the East African press.
- Interview with Ms. Kajuju Kageenu (Fusion Capital Rwanda, Country Manager).

GroFin Africa Fund

Basic Features

Nature and Status

GroFin Africa Fund (GFAF) is a commercially oriented fund, managed by South Africa-based GroFin Group. The fund was established in 2008, although its predecessor funds started as early as 2004. The earlier funds have all been fully invested and are currently managed under the GFAF. The fund has an expected life of 10 years (now in its seventh year) and is currently in the investment phase. It is a mid-term financier, with deals extending between three and seven years.

Geographical Coverage and Location

GFAF operates in nine countries throughout Africa, including **Tanzania, Uganda, and Rwanda**. GroFin is incorporated in Mauritius and has 10 offices in nine countries (Tanzania, Uganda, Rwanda, and Kenya, in East Africa); it is headquartered in Kenya and Mauritius.

Funding

GroFin Group currently manages seven funds, with a total of about **\$320 million** under management. GroFin subsidiaries in the various countries have no restrictions on the amounts they can withdraw from the general fund. Withdrawals depend on identified deals per country.

Financing is provided by (i) **development finance institutions** (DFIs), including CDC, AfDB, IFC, FMO, Proparco, Norfund, EIB, BIO, SIFEM, and Finnfund; (ii) **corporate companies and banks**, including Shell, Diamond Bank, Triodos, ABSA, DFCU, BCR, BOA, and CBA; and (iii) **corporate foundations**, namely Shell Foundation, Syngenta, Skoll Foundation, and Deutsche Bank Foundation.

Investment Policy

Investment Criteria and Guiding Principles

GroFin provides **“growth finance” to SME**, supporting deals that are usually beyond banks’ comfort zone (*“GroFin caters to clients whose needs are left undelivered by banks. Traditional credit institutions also wish to cover incremental clients, but are not willing to take on risky profiles of the kind endorsed by GroFin.”*).

While investments in start-ups are not formally ruled out, GFAF **preferably invests in businesses with a proven track record**, with a few years of operations. In practice, GFAF typically invests in businesses that employ up to 100 people; have gross assets of less than \$3 million and/or a per year turnover of less than \$5 million. Funding can be used for **both investment and working capital purposes**.

Sector Focus

As a **generalist** SME financier, GFAF does not target any sector in particular, but there are sectors (for example, mining, primary agriculture, and new technologies) in which it does not invest a priori because they are perceived as too risky. In the agricultural sector, GroFin only looks at investments from the agro-processing stage upward, along the value chain; primary agriculture is ruled out—it is considered too unpredictable and therefore risk-laden.

Size of Deals

GFAF targets deals in the **\$50,000–\$1.5 million range**. In practice, the average investment size in Uganda and Tanzania is around \$300,000, with later deals with a tendency to increase (see below). In order to protect against the risk of nonperformance, financing is typically not released in one go, but gradually, in installments of variable amounts.

(continued)

GroFin Africa Fund (continued)

Financial Instruments	<p>GFAF primarily invests in the form of loans, with some use of equity and quasi-equity instruments. The use of various instruments is determined taking into account prevailing conditions in the various countries of operation. For instance, in Uganda, deals often involve a combination of debt (60 percent) and equity (40 percent). Interest rates are flexibly determined, taking into account prevailing rates in the banking sector and applying a risk premium based on the specifics of the deals and client.</p> <p>GFAF requires collateral from clients (“<i>collateral is needed to share risk</i>”), although the approach is more flexible than in the case of banks. The coverage of collateral should near 70–75 percent of the loan value, although it may also be less, depending on the client and related business case. By and large, presenting contracts or land deeds as collateral boosts clients’ applications. In the case of machinery, GFAF collateralizes its discounted value (50 percent of baseline value).</p> <p>Although GFAF’s resources are denominated in U.S. dollars, investments are generally in local currency. Hard currency deals are possible in the case of clients who have sufficient revenues in U.S. dollars (basically, exporters).</p>
Attitude toward Innovative Ventures	<p>GFAF only invests in businesses with demonstrated viability and growth potential. Innovative sectors are not kept entirely aloof (they did some investments in ICT), but they certainly do not constitute a prime target.</p>

Operations

Portfolio and Pipeline	<p>GroFin Africa Fund has made investments in about 65 businesses in Uganda and Tanzania, with deals averaging between \$300,000 and \$350,000.</p> <p>In Uganda, over the past two years, GFAF has made 16 deals, selected out of a pool of well over 150 applications; the realized deals span \$75,000–\$1.5 million in value, with a peak in the last eight months (March–October 2012). The most profitable of these deals were in the manufacturing and service (especially <i>mobile money</i>) sectors. Over the last couple of years, Uganda deals have averaged \$200,000, although in previous years the average value used to be considerably lower (\$100,000); it is only in recent times that deals have risen to \$300,000–\$350,000. GFAF is also about to finance a \$1.2 million deal in the seed industry. The potential pipeline for the 2012 financial year in Uganda was set at \$14 million in investments, but it will possibly exceed this target.</p> <p>In Tanzania, the first deal was finalized in 2008, followed by around 50 others, until Q4 of 2012; overall they have averaged \$300,000, with later deals being more sizable.</p>
Exits and Performance	<p>In Tanzania, GFAF has already exited six deals. In five cases, exits involved the repayment of loans/buyback of the participation; in the remaining case, the exit was through a trade sale (participation bought by another company). There are currently 40 other ongoing deals that are faring well, with the exception of two to three not entirely performing cases.</p> <p>Loan performance is regularly monitored—it is reviewed through monthly management accounts—to compare results to initial projections.</p> <p>In Uganda, there have been no exits to date, but the performance of the current portfolio is reportedly good.</p>
Post-Investment Assistance	<p>Complement to all GroFin financing agreements is the provision of business support/TA; to this end, GroFin Uganda has a dedicated portfolio manager and is to expand its staff base to make its TA offer increasingly robust. On its part, GroFin Tanzania delivers TA for financial and business development, in order to boost its clients’ business case skills and financial management skills.</p>

(continued)

GroFin Africa Fund *(continued)*

Other Aspects

Investment Process. The overall investment process, from receipt of the application to disbursement, takes an average of two months. The main bodies in charge of approval are the Finance Committee, composed of four individuals, and the Investment Board. These two do not have a fixed meeting schedule; rather, they convene according to need. Applicants submit their business plans to GroFin, subject to a 0.75 percent application charge. A first screening is performed by GroFin trusted intermediaries, who apply a preliminary filter on the applicant. The application is subject to two levels of approval, resulting in an extra 1.75 percent charge. The last stage of screening requires approval from the board, after which the agreement is signed.

Evolution in the Use of Financial Instruments. In 2005–2006, GroFin used to finance primarily through **equity**; it still does so, partly. However, over time it became clear that the East Africa market is better suited for **debt** financing. GroFin noticed that entrepreneurs were averse to equity when this meant that an external party would share in the company's ownership. As a consequence, GroFin now makes extensive use of debt instruments and self-liquidating loans tailored to investee needs, as well as equity and quasi-equity structures and incentive-based repayment schedules.

Fund Manager's Remuneration. Fund management arrangements include a 3 percent management fee, but no success fee.

Sources

- GroFin website, <http://www.grofin.com>.
- GroFin Prospectus, 2012.
- Interview with Mr. Emmanuel Elisante (GroFin Tanzania, General Manager).
- Interview with Mr. Daniel Bukenya Yiga (GroFin Uganda, Business Development Manager).

InReturn East Africa Fund

Basic Features

Nature and Status

InReturn East Africa Fund was an **impact investment fund** managed by InReturn Capital (IC). IC was established in 2007 and launched IEAF in July 2008, with first closing in January 2009. In 2011, it merged with Jacana Partners and is branded Jacana. The fund has an expected life of 10 years and is currently in the investment phase.

Geographical Coverage and Location

IEAF targets investments in **Kenya, Uganda, and Tanzania**. Kenya is expected to account for 60 percent of investments, with Uganda and Tanzania accounting for 20 percent each.

The fund manager is a limited liability company based in the Netherlands, with subsidiaries in Tanzania and Kenya. Another subsidiary is expected to open in Uganda.

Funding

At second closing (December 2011), IEAF reached **€8.2 million**, up to €4 million at first closing. The fund expects to raise additional capital in the future, with a total fund target size in the order of €15–€20 million.

About two-thirds of funds (€5.2 million) come from **private investors** in the Netherlands, mostly development-oriented established businesses interested in commercial investments cum social returns. Remaining funds were provided by two **Dutch development organizations** (Cordaid and Stichting Doen, €2.5 million), with the fund manager investing €500,000. Up to €1.55 million of the funds committed by Cordaid and the fund manager are structured as first loss protection for other investors.

IEAF also received **grant funding** (about €600,000) from the Dutch Ministry of Foreign Affairs and Cordaid, to cover set up and operational expenses.

(continued)

InReturn East Africa Fund *(continued)*

Investment Policy

Investment Criteria and Guiding Principles	Investments must combine reasonable commercial returns with social impact . In particular, the fund has a target of 10 jobs created per €100,000 invested (that is, one job per €10,000). To ensure that social impact considerations are duly taken into account in investment activities, part of the carried interest is linked to the achievement of impact targets (see below). The target return to investors is in the region of 10–15 percent per year.
Sector Focus	IEAF is a generalist fund , with no specific sector orientation. In practice, the majority of investment opportunities are expected to emerge in agro- and food processing, transportation, manufacturing, construction, renewable energy, logistics, and health care.
Size of Deals	In principle, IEAF targets deals of up to €2 million, with initial investments in the €250,000–€1 million range . However, there are indications that actual size of deals may be higher (for example, there is a deal under finalization in Tanzania worth \$2.6 million). Investments below \$150,000–\$200,000 are considered not viable.
Financial Instruments	IEAF makes use of both equity and debt , sometimes in combination (20 percent equity and 80 percent debt), as well as of royalty-based instruments (with royalties depending upon revenue). In the case of debt financing, collateral is required , although at lower levels than those requested by commercial banks. In general, collateral does not exceed 50–60 percent of the value of financing. Funding is typically provided in local currency .
Attitude toward Innovative Ventures	While innovative ventures can be considered, IEAF prefers to invest in proven business models rather than untested ones (“ <i>right now, we cannot afford to go wrong</i> ”). The limited appetite for risky ventures is confirmed by the fact that key criteria for considering investments include the experience and management capacity of the investee and the “ <i>flesh</i> ,” that is, how much money the investee can contribute.

Operations

Portfolio and Pipeline	As of mid 2012, IEAF had invested in four companies , all based in Kenya. The first deal in Tanzania was in the process of being finalized in October 2012. This is a minority equity investment in a cargo handling company, in association with the Soros Fund. The number of investments is somewhat below initial expectations , which anticipated about two deals per year. In Tanzania, over the last two years IEAF has been receiving an average of about four applications per month, but most of them were of limited interest, and did not pass the initial screening stage (but the quality of the pipeline is improving over time). In addition, some deals fell apart during negotiations or at the due diligence stage.
Exits and Performance	No exit so far . Apart from the reimbursement of debt, exits are expected to involve trade sales or buyback of shares from owners/managers.
Post-Investment Assistance	The fund manager reportedly adopts a hands-on approach, providing assistance to investee companies. Further support is provided through an agreement with Jacana Partners, another equity investor in East Africa (but with focus on Kenya), who can mobilize advisory services.

(continued)

InReturn East Africa Fund *(continued)*

Other Aspects

Investment Process. The process starts with an initial three- to four-day screening review, following which additional information is requested from the promoter and/or gathered autonomously. This is followed by a qualified inquiry, involving a deeper analysis. If results are positive, the prospective deal is submitted to the Investment Committee for an in-principle approval. This is followed by the due diligence, consisting of one week on the ground and another week of desktop work. Then the investment case is referred back to the Investment Committee for final approval. After this point, the legal procedures to formalize the investment start, which can take about one month. In principle, the whole process should take between four and six months, but it can take longer, due to the need to verify the information provided by the prospective client or because of other circumstances (for example, in the case of the Tanzanian cargo handling company, the counterpart was initially not interested in an outside investor).

Investment Environment. Equity/quasi-equity is new to Tanzania and business angels are near nonexistent. This is both a cause and a consequence of the under-sophistication of local entrepreneurs, for which there is no quick fix (but the lack of a more basic “repayment culture” is also noted). Other issues involve the availability and the quality of collateral (for example, there are three to four different types of ownership deeds that one can have) as well as the ability to foreclose on collateral (“*usually the law takes sides with the entrepreneurs, not with the VC.*”).

Legal Aspects. In Tanzania, IEAF is registered with the central bank as a nonbank financial institution. The registration process was short and relatively easy (only two weeks), as they benefited from the experience made by GroFin, which paved the way.

Sources

- InReturn Capital website, <http://www.inreturncapital.com/>.
- InReturn Capital East Africa Fund I presentation.
- Interview with Mr. Ezra Musoke (InReturn Capital Tanzania, Managing Partner).

Mango Fund

Basic Features

Nature and Status

Mango Fund (MF) is a not-for-profit impact investment fund administered by the fund’s own management (Mango Fund). MF was established in 2011 as an outgrowth of the Seed Fund, active since 2008 (see below for more details on the Seed Fund).

Geographical Coverage and Location

MF currently targets investments only in **Uganda**. It is registered as a nonprofit organization in the United States but is headquartered in Kampala, with one office in Arua. For the future, MF plans to extend its services to other East African countries.

Funding

MF has an overall capital of **\$1 million**, provided by private investors (two grants of \$500,000 each).

Investment Policy

Investment Criteria and Guiding Principles

MF does not target greenfields and complete start-ups; investees should have been **in operations for at least one year**. Firms eligible for MF financing are SME with expansion or proof-of-concept capital needs, and with the ability to pay back between 6 and 24 months. Other selection criteria are **value addition** and **social impact**. MF is testing a model that will allow it to become sustainable, so it is currently looking for **financial returns**, along with social ones. The target return to investors is 12 percent.

Sector Focus

MF is a **generalist fund**, with no specific sector orientation. In practice, the majority of its investments have been in the agricultural, agribusiness, and manufacturing sectors.

Size of Deals

In principle, MF targets deals between **\$5,000 and \$100,000**. In practice, however, its largest deals have been in the region of \$60,000.

(continued)

Mango Fund *(continued)*

Financial Instruments	MF currently administers only loans at a 35 percent interest rate, but aims to extend to equity ; upon testing, the use of royalties proved to have only partially satisfactory outcomes. Collateral is required , although its coverage varies according to the deal. Both movable and unmovable assets may count toward collateral (land titles, vehicles, and so on). Alternative arrangements include asset financing and leasing. Loans are disbursed in U.S. dollars .
Attitude toward Innovative Ventures	Innovation as an investment criterion is not compulsory, but preferred. MF is particularly eager to back entrepreneurs with a business concept with high value addition content.

Operations

Portfolio and Pipeline	MF has eight deals currently under way (including sunflower seed processing and recycling of plastic). The goal is to reach 50 deals within three years from the start.
Exits and Performance	To date, there has only been one failure, and two nonperforming loans; the latter two underwent restructuring.
Post-Investment Assistance	MF provides hands-on post-investment assistance in financial and business development. TA is delivered directly by in-house staff and varies according to investee's need.

Other Aspects

Seed Fund. The Mango Fund is an outgrowth of the earlier (soon to be merged) Seed Fund, a microfinance social impact fund delivering loans in the \$1,000–\$10,000 range, established in 2008. The Seed Fund is nonprofit driven and seeks to recover and reinvest its funds as many times as possible to nurture an increasing number of small businesses. The Seed Fund has successfully phased two of its deals into the Mango Fund, to meet its investees' rising investment needs.

Investment Process. MF accepts and reviews applications on a rolling basis. The number of applications received has been increasing over time, reaching five applications per week. About 20 percent of applications are considered for a first selection round. If shortlisted, applicants are interviewed, during which the *business plan* is presented and the entrepreneur is asked to discuss internal and external factors that may affect viability of (such as market competition, supply chain, and so on). If successful, the applicant undergoes a third and last selection stage, whereby the prospected financial model is discussed. Following this stage, the Investment Committee takes the final decision. The length of the overall application process varies and may take from three weeks to one month.

Sources

- Mango Fund website, <http://www.mangofund.org>.
- Interview with Mr. Sam Wheatley (Mango Fund, Business Analyst).

Savannah Fund

Basic Features

Nature and Status	Savannah Fund is a commercially oriented fund managed by its three founders, Eric Hersman, Paul Bragiel, and Mbwana Alliy. The fund was established in June 2012, with a 10-year life and with the aim to be followed by a successor fund. It is currently in the fund-raising phase.
Geographical Coverage and Location	Savannah intends to invest in Sub-Saharan Africa at large, but its initial focus is on Kenya and Tanzania only. It is registered and located in Nairobi.

(continued)

Savannah Fund *(continued)*

Funding	<p>As of Q4 of 2012, Savannah was still in fund-raising phase and expected to collect between \$7.5 and \$10 million. Its aim is to reach \$1 million by its first close, scheduled for March 2013. The fund will be apportioned for the Accelerator tests/experiments program (7 percent), an Accelerator Seed Follow-on Fund (29 percent), an Independent Seed Fund (35 percent), and a mix of Seed/Series A Follow-on and Revenue Based Financing (RBF) Fund (29 percent).</p> <p>The fund’s providers will be exclusively private investors.</p>
----------------	--

Investment Policy

Investment Criteria and Guiding Principles	<p>Savannah is a seed capital fund specializing in investments in early stage high-growth start-ups to help tech entrepreneurs’ ideas transition from prototypes to scalable businesses. It invests in for-profit sustainable businesses offering scalable products or services addressing the Sub-Saharan Africa market; thus it targets both financial returns and an increase of the overall ICT/ICTE deal flow in the region.</p>
Sector Focus	<p>Savannah is a specialist fund with an ICT/ICTE focus; accordingly, it invests in technology (web and mobile) start-ups.</p>
Size of Deals	<p>Drawing from its Independent Seed portion, Savannah will make three-year deals ranging from \$100,000 to \$500,000.</p> <p>Under its Accelerator Program, Savannah will disburse \$25,000 to participating companies (“Accelerator tests/experiments”) in exchange for approximately 15 percent of their common stock (nonnegotiable). Subsequently, Savannah will invest in the successful accelerator graduates to the tune of \$100,000–\$200,000, drawn from Savannah’s Accelerator Seed Follow-on Fund.</p>
Financial Instruments	<p>Savannah will be investing through equity only.</p>
Attitude toward Innovative Ventures	<p>Innovation is inherent in Savannah’s investee companies. Applications are screened in-house by Savannah’s partners, who all have multiyear track records in technology companies.</p>

Operations

Portfolio and Pipeline	<p>Overall, the Independent Seed Fund should invest in more than 20 seed deals. So far, it has realized one deal in Kenya, in biNu, a privately held company in the process of developing a mobile platform transposing iPhone-like applications to low-end smartphones and feature phones.</p> <p>Under the Accelerator Program, batches of five companies will be enrolled for a period of three months, and will receive capital injections (see above) accordingly; two batches per year are envisaged, for three years.</p> <p>The Seed/Series A and Follow-on Fund will co-invest in a subset of Savannah’s outstanding portfolio cases (about 35 investments expected).</p>
Exits and Performance	<p>No exits yet. Concerning strictly the Accelerator Program, Savannah expects that as many as half of them (15) will prove successful. Eventually, only a tiny minority of these companies will be bought out (with buyout as ultimate proof of the company’s success).</p>
Post-Investment Assistance	<p>Savannah investments will be hybrid packages of capital and TA support through the fund’s mentor and angel networks, early backers and co-investors from Silicon Valley, as well as from local mentors. The fund’s partners, tech entrepreneurs with extensive experience in the United States and Sub-Saharan Africa, are Savannah’s core mentors.</p> <p>Savannah will also provide a form of pre-investment assistance: one of the fund’s components is indeed the Accelerator Program, whereby Savannah stimulates and builds up entrepreneurs, preparing them to effectively capture and absorb capital.</p>

(continued)

Savannah Fund *(continued)*

Other Aspects

The Fund's Rationale. The fund's architecture and its operating principles are heavily influenced by Silicon Valley models, underscoring successful IT businesses in the United States. Compared to the East African investment landscape, Savannah is one of a kind: it is risk-prone, ready to tolerate high failure rates (much higher than most other investment funds), and counts on the booming of only a tiny minority of its investees. Given these premises, it is doubtful that this model is easily replicable. Savannah is characterized by a very simple governance structure: it has no Investment Committee as such, its management consisting only of its three partners and an adviser from Draper Fisher Juvenon (DFJ). After this fund is fully invested, Savannah expects to give way to a successor fund.

Investment Environment. Investment in the technology sectors has not been thriving in Sub-Saharan Africa. There is hardly any angel investment outside of Kenya, and, as a general trend, angel investors are put off by ICT ventures, since these are perceived as high risk. Savannah is trying to fill this gap through its own mentoring and investment.

Other External Factors. The overabundance of competitions and awards for entrepreneurs in ICT is making tech entrepreneurs lose focus. In the pursuit of one prize after another, tech entrepreneurs do not spend long enough on the development of one single product (*"Too many competitions will end up crowding out the very good ideas"*). The quality of the final products is therefore erratic and business ideas all too often remain incomplete. Entrepreneurs cannot access enough capital to be able to build up and finalize their prototypes.

Sources

- Savannah website, <http://www.savannah.vc/>.
- iHub Info Session: Savannah Fund Overview, July 26, 2012.
- Interview with Mr. Mbwana Alliy (Savannah Fund, Managing Partner).

Schulze Global Ethiopia Growth and Transformation Fund I

Basic Features

Nature and Status	Schulze Global Ethiopia Growth and Transformation Fund (SGE) is a commercially oriented fund managed by Schulze Global Investments (SGI), an emerging markets private equity firm. SGE was established in 2012 (operational as of November 2012).
Geographical Coverage and Location	SGE targets investments in Ethiopia only. Since 2008, SGI is registered in Ethiopia and operates out of Addis Ababa as a consulting company (not as a fund manager), although the general fund is incorporated and located overseas.
Funding	At final closing, SGE will have reached \$100 million in capital. With a \$15 million contribution, CDC is the leading fund provider, along with other development finance institutions and private investors .

Investment Policy

Investment Criteria and Guiding Principles	SGE provides long-term growth capital to SME in expansion phase (not start-ups) and whose financing needs are left untouched by Ethiopian banks' traditionally conservative lending practices. In particular, it will target SME that have the potential to become major players in their respective industries. Additionally, at the same level as financial returns , SGE also holds social, governance, and environmental impacts at the core of its investment strategy.
Sector Focus	SGE is, in principle, a generalist fund , with no sector-specific orientation. In practice, its investments are expected to focus primarily in the agro-processing and manufacturing sectors.
Size of Deals	SGE will typically seek to deploy investments in the \$1-\$10 million range .

(continued)

Schulze Global Ethiopia Growth and Transformation Fund I *(continued)*

Financial Instruments	SGE will make equity investments only. This choice is dictated by regulatory constraints that make quasi-equity/royalty loans not feasible (see below).
Attitude toward Innovative Ventures	SGE does not rule out innovative businesses, but they have not received many applications from investees with a proper innovative profile, nor have they invested in any of them so far.
Operations	
Portfolio and Pipeline	Reportedly screened a “quite large number of deals,” but currently focusing on half a dozen potential investees.
Exits and Performance	No exits so far. SGE will be a “patient investor,” with a typical investment horizon of multiple years.
Post-Investment Assistance	SGE does not plan any special arrangements for TA delivery, besides the standard support delivered through board participation.

Other Aspects

SGI Earlier Presence and Operations in Ethiopia. SGI established its Ethiopia office in 2008, but it was not until 2012 that it set up a dedicated fund for investments in the country. Before 2012, SGI used to identify investments to then raise funds accordingly, on ad hoc basis. Over this period, it finalized four deals.

Legal Aspects. SGE complies with the investment guidelines included in the Ethiopian revised national investment code; accordingly, it will only operate in sectors open to foreigners, which exclude banking, finance, and retail. SGE is *not* licensed as an equity investment company but instead operates as an investment consultancy. As such, its status does not lend itself to any ambiguity: it plainly *isn't* a financial institution. For its transactions, it obtains an investment permit on a case-by-case basis, upon identification of deals in those investment areas that are explicitly open to foreigners. Schulze never considered making mezzanine investment, as this might be considered akin to a banking activity and, as such, not open to foreigners (“*you don't know how mezzanine is going to be interpreted by NBE/EIA. It's never been allowed and we won't be the ones who try first*”).

Investment Environment. It is noted that other private equity companies have been entering Ethiopia; they may even realize some transactions, but they eventually withdraw from the country. In contrast with SGE, they do not intend to operate in the country on a permanent basis.

Sources

- Schulze Global Investment website, <http://www.schulzeglobal.com/markets/africa/ethiopia/>.
- Interview with Ms. Berhane Demissie (Schulze Global Ethiopia Growth and Transformation Fund I, Managing Director).

Annex D: Basic Features of Banks Analyzed⁶²

⁶² Unless otherwise indicated, financial data refer to 2011.

Bank	Country	Typology	Year Established	Total Assets (US\$, millions)	Loan Portfolio (US\$, millions)	Ownership	SME Credit Lines and Other International Support
Commercial Bank of Ethiopia	Ethiopia	Commercial bank	1942	6,536	4,323	Fully state-owned	
Dashen Bank	Ethiopia	Commercial bank	1995	840	455	National private investors (companies and individuals)	Credit guarantee scheme with USAID
Zemen Bank	Ethiopia	Commercial bank	2008	89	37	National private investors (companies and individuals)	Credit guarantee scheme with USAID
Bank of Kigali	Rwanda	Commercial bank	1966	472	201	State and social security fund (> 50%), institutional and private investors	Credit lines with EIB, AfDB, and AFD
Banque Rwandaise de Développement	Rwanda	Development bank	1967	142	108	State and public pension funds (> 50%), AFD, DEG, AGCD, Bank of Tokyo	Credit lines with EIB and AfDB
FINA Bank	Rwanda	Commercial bank	2004	20	12	FINA Group (Kenya)	
Access Bank	Tanzania	Microfinance bank	2007	33	19	Access Holding—Germany (> 50%), IFC, AfDB, BIO, KfW	
CRDB Bank	Tanzania	Commercial bank	1996	1,682	903	DANIDA (21%), pension funds and private investors (> 50%)	Credit line with DANIDA. Credit guarantees from AGF
Tanzanian Investment Bank	Tanzania	Development bank	1970	193	115	Fully state-owned	Credit line with World Bank
Centenary Bank	Uganda	Microfinance bank	1983	378	209	Catholic organizations	Credit lines with DANIDA and EIB. Credit guarantees from Rockefeller Foundation
DFCU Bank	Uganda	Commercial bank	1964	381	197	CDC (60%), NORFUND, institutional and private investors	Credit lines with EIB, NORFUND, FMO, KfW, etc.
Uganda Development Bank⁶³	Uganda	Development bank	1972	51	..	Fully state-owned	Credit lines with BADEA, IDB, Kuwait Fund

63 Data refer to 2010.

Annex E: Profiles of Selected Innovative Firms

What follows is a presentation of the salient features of 10 enterprises active in the three sectors analyzed.⁶⁴ The selection was so made to offer a limited number of businesses that alone can be considered fairly representative of the universe of similar MSME players in the East Africa region.

E.1 Blackmark Corporation (Tanzania, ICT)

Origins and Operations. Established in 2007 and registered as a limited liability company, *Blackmark Corporation* is active in the development of **information management solutions for education institutions**. The main project currently is the development of a school system that provides education managers with real-time access of all essential data and information relating to student performance and administrative data (for example, students' personal records, school fees' payments, and incidence of special needs). The company started with an initial capital of \$7,000, contributed directly by the founders. It currently employs four full-time staff, with an annual turnover of \$218,000.

Financing Needs. The company recently obtained a **\$63,000 working capital loan** (six months) from Tanzania Investment Bank (TIB). The money was needed to implement a government contract for the setting up of a training facility for police

academies. It is a quite sizable contract, with a total of about \$310,000 (T Sh 500 million), and *Blackmark* urgently needed liquidity for working capital. The company managed to get the loan thanks to the support from COSTECH/ Dar Teknohama Business Incubator (DTBi). **DTBi** took steps to have the Commission for Science and Technology (COSTECH) act as a guarantor in relation to TIB to support *Blackmark's* loan application. In so doing, DTBi has not provided a full-fledged guarantee (COSTECH's bank account has remained separate and is only regarded as a "comfort," "a moral guarantee"), but it has become a cosignatory in the bank account where the loan money is disbursed, so ensuring that the loan money is taken for its intended use only. The company had applied for bank loans before, but it was turned down on account of its lack of collateral.

Support Received. *Blackmark* joined DTBi in 2011 as a with-wall incubatee. Support from DTBi was crucial in getting access to funding, but the company also benefited from the provision of **business development and financial planning advice**. In addition, participation in exhibitions gives the company **exposure to a variety of market actors**, and the association with DTBi is felt to have positively influenced the image of the company ("It improves our reputation").

Comments. *Blackmark* is a clear example of how "traditional" bank lending can play a crucially important role in activities that, due to the (small) scale and (short-term) nature of financing needs, are unlikely to ever qualify for any form of equity financing. It also exemplifies the crucially important role of guarantees in addressing the collateral issues and demonstrates how a well-run incubation facility can devise imaginative solutions to support its incubatees. Based on the experience gained in this particular case, DTBi, COSTECH, and TIB are considering the possibility of a more

⁶⁴ The information displayed in this annex is for presentational purposes; in view of preparing the Final Report, some of the information hereby included may be anonymized.

structured cooperation, possibly to be formalized in a memorandum of understanding (MOU).

E.2 Power Electronics and Control (Tanzania, Climate Technology)

Origins and Operations. *Power Electronics and Controls* (PET) was established in 2007 with an initial capital of \$3,000, entirely provided by its founder, a graduate in Electronic Engineering. Registered as a sole proprietorship, PET is active in the design, production, and installation of clean energy equipment, such as solar panels, wind turbines, and micro-hydroelectric generators. The main product line is **wind turbines for household use**, with a generation capacity of 1,000 W to 5,000 W. Having participated in the incubation program run by the Small Industry Development Organization (SIDO), the firm is currently located in one of SIDO's industrial estates, where it has access to workshop space and to other facilities (for example, Internet connection). PET employs six full-time and one part-time staff and the annual turnover amounts to \$150,000. The firm's performance is positive, and the demand for its services high.

Financing Needs. PET is currently facing capacity constraints, and at times it has been forced to turn down orders from clients. Accordingly, the firm is considering moving to a larger location (the space within the SIDO compound is limited), purchasing some additional equipment, and investing in product development and marketing. Financing needs are estimated at about **\$100,000, over a period of three to five years.**

Support Received. PET joined the SIDO incubation program in 2007 as an in-wall incubatee, and graduated three years later. Soon after joining the program, PET received a \$1,500 soft loan from SIDO. In addition, in 2010 SIDO introduced PET to the Tanzania Rural Electrification Agency (TAREA), which awarded a grant to the firm, disbursed from

an internal fund supplied by the government in an effort to support rural electrification projects. PET's experience with the incubation program has been extremely positive. In addition to the financial support (both direct and indirect through TAREA) and the access to facilities, the firm could benefit from technical advisory services and, more generally, from assistance from SIDO's professional network. The incubation program also gave PET the opportunity to get in touch with a variety of market and energy sector actors, through the participation in exhibitions.

Comments. An excellent example of how a well-conceived incubation program, even with modest means, can make significant contributions to the development of MSME. PET has achieved a good level of technical and commercial skills and displays significant potential for growth. The investment plan is more than reasonable and the financing needs fully justified. However, as the firm does not own any real estate, access to bank loans is likely to be difficult (and the amount of money sought is too small for being considered by any equity investor). Although the firm can generate some funds internally, production is liable to be slowed down due to the firm's inability to meet its financing needs.

E.3 Brudan (Uganda, ICT)

Origins and Operations. *Brudan* was established in 2012 and is in the process of being registered as a limited liability company. The firm is active in **apps development, Internet marketing, web development, motion graphics, and animation.** The main current project is the development of a mobile app that allows estimating the cost of traveling on local motorcycles and vans against a given distance in kilometers. The company's initial funds amounted to \$200 and came from the founders' own savings as freelance consultants, their families, and friends. To date the firm hasn't employed anyone besides its founders, three recent university graduates in ICT, business, and design.

Financing Needs. *Brudan* would currently need an additional **\$800**, mainly for product development, marketing, and the company's registration expenses (\$150). The founders have been looking for funding and, in principle, they are considering both debt and equity. However, equity is regarded with some skepticism ("*we would consider it as the last option*"), as in the eyes of management it would entail giving up part of the control over the company's operations. The owners have already approached some potential investors, but did not reach an agreement with any of them, as these investors would not accept to inject any funding unless they received 80 percent of the company's shares. Contacts were also made to access funding under the Uganda Youth Venture Capital Fund, but the experience was also negative; the application process was described as "*lengthy and cumbersome,*" and the award criteria are not entirely transparent.

Support Received. In May 2012, *Brudan* participated in the Start-up Weekend Competition, an international competition held for the first time in Kampala. The prize awarded to *Brudan* was a seat in the HiveColab incubator for three months. Thanks to **HiveColab incubation**, the firm gained access to office space, Internet connection, utilities, mentorship, and thematic seminars (for example, on marketing and design), and exposure to potential clients, which allowed *Brudan* to save on marketing costs. Under HiveColab incubation, each start-up is assigned two mentors, respectively in business and product development; incubatees and mentors hold bimonthly meetings, either face-to-face or online. In the case of *Brudan*, the business development mentor is an experienced adviser managing the public relations of two media and telecom companies. The incubation experience has been very positive and the promoters also point to the resulting improvement in their company's reputation ("*incubation at HiveColab brings with it a reputational advantage, as well*").

Comments. *Brudan* is a typical example of an ICT start-up with very modest financing needs. However, precisely because of their modesty, these needs are unlikely to be addressed. The lack of any track record would pose major problems with banks and, unless they can secure some form of collateral from relatives, it would be impossible to obtain any credit. At the same time, microfinance schemes also offer little opportunities, as the nature of financing needs

is scarcely compatible with microfinance basic operating modalities, whereby borrowers are entitled to borrow only after saving some self-generated capital).

E.4 Amagara Skincare (Uganda, Agribusiness)

Origins and Operations. *Amagara Skincare* is active in the **production of cosmetics enriched with 100 percent natural extracts, notably fruits, vegetables, and herbs** (for example, rosemary, peppermint, thyme). The firm reproduces the Body Shop concept, already popular in Western countries and all products are combinations of natural extracts and essential oils. *Amagara* (which means "life" in the local language) purchases all raw materials from Uganda, thereby constituting an interesting source of income for local farmer communities. Majority-owned by a well-known figure in the Ugandan business community (the president of the Uganda National Chamber of Commerce and Industry), *Amagara* was incorporated as a limited liability company in 2011, but development started in 2008. Over the years, the founders have injected about \$420,000 into the business, which was used to purchase equipment (about 17 percent), for construction and real estate (36 percent), for product development (27 percent), as well as for working capital purposes (some 20 percent). The company currently employs 10 full-time staff. Commercialization started in the fall of 2012, and *Amagara* products are currently on sale in some supermarkets (100 products sold weekly, at an average price of \$7.5) as well as distributed to hotels (100 liters monthly).

Financing Needs. *Amagara* is planning to scale up operations, to expand retail and bulk sales (negotiations are ongoing with well-known hotels/hospitality chains and fitness centers). However, expansion would require substantial investment, which would allow *Amagara* to move away from slow manual processes to "*intelligent, high-quality and precise manufacturing.*" According to a concept paper developed by the management, investment costs are in the order of **\$560,000**, of which two-thirds would be used to purchase new equipment (vacuum emulsifying homogenizer, stainless tanks, bottling equipment, and so on) and the remaining third would serve to expand the existing warehouse and cooling facilities. The management considered applying for a medium-

term bank loan (five years), but the conditions offered were not advantageous (interest rate in the region of 24–26 percent) and requiring a higher IRR than the company can afford at this stage. The company is currently looking for investors and is open to considering equity financing. As a new company, they would welcome experienced professionals to hold a minority stake and sit on the board, as long as this resulted in significant value added to *Amagara's* leadership. The only condition is placed on the company's identity, which is and should stay a Uganda brand.

Support Received. *Amagara* has been incubated at the **Uganda Industrial Research Institute** (UIRI) since 2009; the incubation service was initially for research purposes only, although through UIRI, the *Amagara* team could later access equipment and machines, as well as benefit from the assistance of microbiologists during the prototyping phase. As a UIRI incubatee, *Amagara* was also granted free access to rental space and utilities (power and water). Two MOU were signed with UIRI; the first one (in 2009) was for incubation in the microbiology lab and prototyping work for roughly two years. The second MOU (in 2011) underscored the passage from *Amagara's* graduation to commercialization, extending the presence on the UIRI premises for another two years. By the end of that period, the company will have moved into a new facility, to be privately owned and managed. *Amagara's* experience at UIRI was extremely successful, as well as enriching for both parties, *Amagara* being the first natural skincare company to be incubated at UIRI.

Comments. *Amagara's* most pressing issue is not so much "access" to finance (the main owner is the president of the Uganda National Chamber of Commerce and Industry and she obviously has well-developed contacts with financial institutions), as it is the "cost" of financing. The size of the investment is a priori compatible with the operating modalities of some investment funds (for example, the African Agricultural Capital Fund). However, as it is unlikely that a commercially oriented investor would accept a remuneration lower than the interest charged by banks, some form of "patient" investor, with a long-term vision would be required.

E.5 Umuseke (Rwanda, ICT)

Origins and Operations. *Umuseke* was established in 2012 and is registered as a limited liability

company. The company is an IT service provider, active in **software development, web design, and IT training**. It hosts the second most popular news website in Rwanda (<http://umuseke.com/>). *Umuseke* also maintains an SME business and service directory. A popular product is its so-called ICT insurance, whereby the company provides customers with an ICT toolkit (hardware, software, and kickoff training), and then takes charge of its maintenance. The initial capital, a modest \$160, came from the founders' savings, and the money was used to develop and host the news website. After the very first sales, some of *Umuseke's* clients agreed to make advance payment, totaling \$6,200. The staff is currently composed of eight full-time and some part-time employees, supported by consultants hired as needed. The annual turnover in the first year of operations is expected to be about \$20,000.

Financing Needs. Currently *Umuseke* would need **\$30,000** to hire qualified employees, diversify its services, and for marketing. The company is nurturing the relationship with its bank, but the owners realize that it is too early to apply for a loan. The owners appear to be open to equity, but only in the form of minority participations. KLab has been trying to link *Umuseke* with external financiers. Recently, the company participated in the Telemberé business plan competition; it was third-positioned and rewarded with participation in a business development workshop, and later introduced to potential investors.

Support Received. *Umuseke* founders participated in an entrepreneurship training delivered to youth as part of the *Umubano* ("relationship") Project, a British Conservative Party initiative. The company uses **KLab** as an incubation space where they can work on developing their products, share facilities and expertise with other KLab members, network, co-work, and use the office space. *Umuseke* co-founders work at KLab as often as three times per week. The company also participates in "*demo nights*," evening events organized by KLab during which members can present their ideas and receive feedback from mentors and peers.

Comments. *Umuseke's* is a potentially interesting investment proposition for tech-savvy business angels (who, however, do not exist in Uganda) or for a seed fund dedicated to ICT, such as the Savannah Fund (currently not operating in Uganda). A possible alternative could be a small guarantee facility anchored to the business

incubation program, which could expedite the loan applications of highly deserving entrepreneurs.

E.6 Osca Connect (Rwanda, ICT)

Origins and Operations. Established in 2011, *Osca Connect* is registered as a limited liability company. The company is active in the **development of mobile and web applications** and is currently developing its first two products: a business directory and an SMS application thought to provide farmers with information. *Osca Connect* was started with an initial capital of \$800, the founders' own savings from their student jobs. The staff is currently composed of the four co-founders. The company has not made any sale yet, but expects to send its first 5,000 SMS in the six months since product launch (scheduled for February/March 2013), thus earning an initial \$5,000 (\$1 per SMS).

Financing Needs. The company is still testing its two launch products, and detailed financial projections have not been developed yet. Broadly speaking, in the medium term financing needs are estimated at some **\$50,000** and the money would be used to hire more employees, rent an office, market its products, and for further product development. In principle, the founders are open to various forms of financing. However, in the short term, they believe that the main funding sources will be grants from competitions and internal funds, at least until the company becomes mature and the products are fully marketable. Bank loans, if any, are likely to come much later in the process.

Support Received. *Osca* is also a member of **KLab**. The selection process to gain a seat in this innovation/co-working space took not more than two weeks, starting with an online application and a form to fill out, followed by a statement of intent and expectations. After being shortlisted, *Osca* was invited to pitch its business case before the KLab panel. As a KLab member, *Osca* has been mentored in business planning, uses the hub's functional premises and high-speed connectivity (KLab's is described by many as the best Internet network in Kigali), and benefits from KLab's professional network and events.

Comments. The company is still at a very early stage of development and the \$50,000 must be regarded as a very rough estimate. Given the

absence of sources for seed financing in Rwanda, focusing on grant funding for the most immediate needs appears as a realistic approach, although the sources of this funding still have to be explored in detail.

E.7 Construction & Renewable Energy Technology (CRET) (Rwanda, Climate Technology)

Origins and Operations. *Construction & Renewable Energy Technologies* (CRET) was established in 2006 as a limited liability company. *CRET* is active in the **production and installation of biogas plants**; since its establishment, the company has installed more than 40 plants across the country, mainly used for the production of electricity. In the future, *CRET* aims at pioneering the production of biogas for the transport sector. In addition, *CRET* recently submitted project proposals to different financial institutions and potential partners to start producing pure methane from human and animal waste, to be used for both transport and cooking. The initial capital, \$800, came from the owner's savings from his previous job as a public employee. The company currently employs six staff and the annual turnover oscillates between \$20,000 and \$60,000, depending on the success in securing public contracts.

Financing Needs. In the past, *CRET* faced problems in securing funding for working capital. In 2007, they obtained a loan of about \$6,000 from the KIST Enterprise Development Fund (KEDF). After that, the company unsuccessfully tried several times to access finance from banks, that is, Cogebank, Banque Rwandaise de Développement, and Banque Commerciale du Rwanda. The main constraint was its lack of collateral. *CRET* once secured a public contract, but was asked for a security of some \$25,000 to execute it. To this end, banks required collateral of \$35,000. *CRET* eventually managed to source \$17,000 from an acquaintance. *CRET* is also looking for funding for its Kigali Biogas Bus project, concerning the establishment of an industrial biogas plant to provide fuel for the transport sector. The project requires an investment in the order of **\$750,000–\$800,000**, mostly for the building of biodigesters and the purchase of compression equipment. The project has been on the table for some time, but recently there have been some positive

developments, as the company partnered with a Swedish company that agreed to sign a MOU with the municipality of Kigali. UNIDO is also reportedly interested in the project, which could be a pilot case in Africa.

Support Received. The managing director of *CRET* graduated from the Kigali Institute for Science and Technology (KIST) and was employed by the school to construct biogas centers countrywide; this experience allowed him to start his own company. Between 2006 and 2009, he has been a virtual incubatee at KIST's **Technology and Business Incubation Facility** (TBIF). As part of the incubation program, he received business training on various subjects (for example, on corporate business management). As indicated above, soon after establishment, *CRET* received a loan from KEDF, through a business plan competition. The loan carried an interest rate of 12 percent and no collateral was required. Initially expected to be used to set up the company, the loan was actually disbursed late, and hence used for business expansion. Also, the company could benefit from business training.

Comments. *CRET* is facing the typical problems associated with a discrete change in the business model, aggravated by the fact that the scale of the investment under consideration is much bigger than the current level of activity (that is, more than 10 times the turnover recorded in recent years, which inevitably increases the skepticism of potential financiers). Irrespective of the merits of the company, the case is representative of many investment opportunities in the biogas sector in the region (see also the case of *4R Energy* in Ethiopia). In the past, this type of investment could have attracted the attention of a specialized renewable energy fund such as E+Co, but the fund recently underwent restructuring due to financial difficulties; as a result, its ability to fund additional initiatives is still uncertain. This leaves a gap that is currently not filled by any of the funds active in the region.

E.8 VASA Engineering (Ethiopia, ICT)

Origins and Operations. *VASA Engineering* was established in 2008 and is incorporated as a limited liability company. The company is active in **software development, providing e-business solutions for company-level decision making.**

It is currently developing human resources management (HRM) software, developed out of an open-source prototype (Orange HRM) and subsequently customized for Ethiopia-based users, and larger Enterprise Resource Planning (ERP) systems, which can control the data of up to 5,000 employees. The products are intended for private sector companies in need of an efficient system to manage their human resources. The initial capital of \$11,000 consisted of the founders' own savings from the sales of hardware and freelance ICT consultancies. *VASA* currently employs only the two co-founders and some temporary workers, and has not made any sale yet, as the products are still to be launched.

Financing Needs. In the past, *VASA* applied for a six-month \$3,000 loan at 20 percent interest from a microfinance institution; initially, the MFI agreed to collateralize a vehicle, which later turned out to be of insufficient value. The company recently approached a local bank (Hebret Bank) to apply for a loan, but did not succeed. *VASA* would currently need **\$4,400** to finish developing its main product and then market it.

Support Received. The company has not received any assistance from incubators or other public support schemes.

Comments. *VASA* represents yet another case of an ICT company seeking a fairly small amount of funding. In this case, however, the long time required to develop the products raises some doubts as to the viability of the operation. It gives an example of the fact that not all ICT ventures are destined to have a bright future and that problems in accessing finance are not just the result of excessively "conservative" bankers/investors.

E.9 African Bamboo (Ethiopia, Agribusiness)

Origins and Operations. *African Bamboo* is a new company active in the **bamboo sector**. The objective is to utilize Ethiopia's large and so far underutilized bamboo resources to produce a wide range of products, for both the global market (woven strand board panels and decking) and the domestic market (bamboo charcoal briquettes and treated bamboo construction poles). The company was formally established in 2012 as a spin-off of Fortune Enterprise, one of Ethiopia's leading producers of furniture, owned by a

diaspora entrepreneurial family who returned to Ethiopia after the fall of the Derg regime. *African Bamboo* is quite a sizable initiative, involving the setting up of a fully vertically integrated operation, spanning from forest operations up to the manufacturing of finished products. Work on the project has been ongoing for more than two years, initially concentrating on technical aspects (with several tests carried out in Germany) and on market prospection (with the establishment of a partnership with a leading European distributor of bamboo products manufactured in China and several scouting visits to potential markets, namely in the Persian Gulf region). This was followed by the start of the work on the agriculture side of the business, which includes the development of a new plantation (under a concession agreement) complemented with outgrower schemes (in the process of being finalized). *African Bamboo* is currently in the process of building the pilot factory, which is about a tenth of the actual processing plant.

Financing Needs. The venture is quite sizable, and total financing needs are estimated at some **\$18–\$21 million**, depending upon the final configuration of the processing plant. The early stages of development were financed with own funds as well as with financial support from various donor schemes (see below). Later stages are expected to be financed with (i) own funds (the promoters are considering investing in the order of \$6–\$7 million), (ii) long-term debt from the Development Bank of Ethiopia (terms are considered to be quite attractive, with an interest rate of 7.5 percent—that is, negative interest in real terms, and repayment periods of 8 to 15 years, with a 3- to 4-year grace period), and, possibly, (iii) other sources, including international organizations (for example, DOB Foundation and the Common Fund for Commodities).

Support Received. Thanks to its very attractive development features (bamboo is a fast renewing resource and the outgrower schemes are going to provide an interesting source of income to rural communities in some of Ethiopia's poorest areas), *African Bamboo* has been able to secure significant support from donor organizations. This includes (i) a €400,000 public partnership project with **Germany's GIZ**, covering the October 2009–March 2012 period and supporting capacity-building activities for agricultural activities, and (ii) a €1.2 million project with **the Netherlands' PSI program**, covering the July 2011–December 2013

period and which will support the setting up of the pilot plant.

Comments. As appears from its basic features, *African Bamboo* hardly compares to the MSME universe that constitutes the focus of this Study. Yet, it constitutes an interesting example in two respects. First, in Africa's agribusiness sector, really innovative ventures (and there is no doubt that the idea of putting to commercial use a resource that has remained unutilized is highly innovative) often involve large-size, vertically integrated interventions. Quite obviously, smaller initiatives are also very useful, but their transformation effect is much smaller and likely to take more time, and will only materialize in the medium to long term. Second, large projects take time to develop and are implemented in separate phases. Therefore, although their overall size falls well beyond the range of financing transactions considered in this Study, opportunities for smaller investments may well arise for the financing of individual stages (for example, prototyping, initial industrial production, and so on). And, indeed, *African Bamboo* is planning to submit a request for funding with the proof of concept facility under the newly established *infoDev* CIC.

E.10 4R Energy (Ethiopia, Climate Technology)

Origins and Operations. The company was established in 2010 by a diaspora engineer who returned to Ethiopia after spending more than 20 years in the United States, together with a local associate with long-standing experience in waste treatment, being a former senior staff with Addis Ababa Water and Sewage Authority (AAWSA). *4R Energy* aims at developing the **production of biomethane from the recycling of municipal sewage**. The initiative is connected with AAWSA's plan to build a series of wastewater treatment plants (WWTP), and involves the establishment of facilities for the production of compressed biomethane gas (CMG). CMG is expected to be sold in cylinders for household consumption, replacing more expensive kerosene and liquefied petroleum gas (LPG). At a later stage, *4R Energy* envisages the use of CMG for the servicing of whole apartment blocks through a distribution mini-grid, as well as the production of biofertilizer for agricultural use.

Financing Needs. In a first phase, *4R Energy* is planning to build a pilot plant (with a capacity of 170–200 cubic meters of raw biogas per hour) at the Kaliti WWTP, involving an investment cost of about **\$700,000**. In the medium term, the construction of a larger plant at another WWTP is also envisaged. This second project has a much bigger capacity (1,400–1,500 cubic meters per hour) and includes a biofertilizer plant. Accordingly, expected investment costs are estimated to be much bigger, in the order of **\$5.5 million**. Overall, the projects are expected to be financed through a combination of debt (60 percent) and equity (40 percent), and the promoters are currently in the process of contacting various prospective financiers. As a large part of investment costs are represented by equipment to be imported from European countries, the possibility of a joint venture with manufacturers of equipment (assisted by some form of export financing and/or export credit insurance from a European export credit agency) is also being considered.

Support Received. The initiative is being developed in close collaboration with the **Environment and Development Society of Ethiopia** (Lem

Ethiopia, <http://www.lemethiopia.org.et/>), a nongovernmental organization promoting natural resources conservation and the development of alternative technologies. Lem Ethiopia signed a MOU with AAWSA for the utilization of the wastewater for the production of biofuels and asked *4R Energy* to develop a detailed proposal for putting the initiative in practice.

Comments. The initiative presents similarities with the one envisaged by *CRET* in Rwanda (see above), although the final utilization of biomethane would be different (household consumption and fertilizer instead of fuel for transportation). The amount of money required for the pilot plant is too small to be considered by the only investment fund currently active in Ethiopia (Schulze does not consider investments smaller than \$1 million), and the larger project is extremely unlikely to be taken into consideration by any financier until the technical and commercial viability of pilot has been demonstrated (*“tell them to visit us a couple of years after the pilot has been launched,”* one of our interlocutors commented). However, the project seems to enjoy strong institutional and political backing and in the end it may well receive support from one of Ethiopia’s state-owned banks.

Annex F: Review of Legal Aspects in Ethiopia

In Ethiopia, the use of equity instruments by foreign entities poses a problem. There is not a regulatory framework for equity investment funds; the guidelines are largely determined, on one hand, by the **investment code** and, on the other hand, by the **legislation on banking**.

The Investment Proclamation. The Ethiopian government has been making efforts, through legislative and institutional reforms, to improve the investment climate of the country and thereby attract more foreign direct investment. In line with market-oriented economic policy, the investment regime has been liberalized through a series of government legislation. Since 1992, the investment code has been revised four times. In 2012, the Investment Proclamation 280/2002 has been revised and replaced by a new one, Proclamation on Investment 769/2012 (hereinafter “the new Proclamation”).

Traditionally, the investment laws of the country provide a list of investment areas reserved for the government, those reserved for Ethiopian nationals, and those reserved for domestic investors.⁶⁵ There appears to be a slight difference under the new Proclamation, where the list includes (i) those areas reserved for government, (ii) those reserved for partnership between the government and private investors, and (iii) those open to foreign investors. The understanding is that those areas not allowed for foreign investors and not reserved for Ethiopian nationals or for the government are open to domestic investors.

⁶⁵ Following Proclamation 280/2002, a domestic investor is an Ethiopian or foreign national permanently residing in Ethiopia having made an investment, and includes the government, public enterprises as well as a foreign national, Ethiopian by birth and desiring to be considered as a domestic investor.

Investment areas exclusively reserved for the government (Article 6.1):

- Transmission and distribution of electrical energy through the integrated national grid system
- Postal services with the exception of courier services
- Air transport services using aircraft with a seating capacity of more than 50 passengers.

Areas open only jointly with the government (Article 6.2):

- Manufacturing of weapons and ammunition
- Telecommunication services

The Proclamation empowers the Council of Ministers, whenever it deems necessary, to determine, by issuing regulations, that areas of investment exclusively reserved for the government or for joint investment with the government be opened to private investors (Article 6.3). This does not apply to areas of investment exclusively reserved for Ethiopian nationals or those reserved for domestic investors.

The Investment Regulation. Under the current investment regime, the following **areas of investment** are **exclusively reserved for Ethiopian nationals**⁶⁶ (Article 3.1):

- Banking, insurance, and microcredit and saving services
- Packaging, forwarding and shipping agency services
- Broadcasting services
- Mass media services
- Attorney and legal consultancy services
- Preparation of indigenous traditional medicines

⁶⁶ A business organization may acquire Ethiopian nationality, provided that its total capital is owned by Ethiopian nationals (Investment Regulation Article 3.2).

- Advertisement, promotion and translation works
- Air transport services using aircraft with a seating capacity up to 50 passengers.

The same Investment Regulation provides a list of **investment areas allowed for foreign investors** (reported in full in the appendix that follows), which automatically excludes banking, as indicated by Article 3.1 reported above.

The national investment code defines the nature of the banking business. In particular, the legislation on banking defines a “banking business” as any business that consists of any of the following activities:

- a) Receiving funds from the public through means that the National Bank has declared to be an authorized manner of receiving funds
- b) Using the funds referred to under (a), in whole or in part, for the account and at the risk of the person undertaking banking business, for loans or investments in a manner acceptable by the National Bank
- c) The buying and selling of gold and silver bullion and foreign exchange
- d) The transfer of funds to other local and foreign persons on behalf of the banks themselves or their customers
- e) The discounting and negotiation of promissory notes, drafts, bills of exchange and other evidence of debt
- f) Any other activity recognized as customary banking business, which a bank engaged in the activities described from paragraph (a) to (e) of this sub-article may be authorized to undertake by the National Bank (Banking Business Proclamation 592/2008, Article 2.2).

It is noted that **the latest investment laws do not make any specific reference to equity financing**. The issue whether or not a private equity fund is an area that is exclusively reserved for Ethiopian nationals or is allowed for foreign nationals thus depends on whether running the fund is

to be regarded as a banking business or not. However, there appears to be no consensus on the precise scope of the country’s banking laws. As a consequence, opinions are divided.

According to the **Ethiopian Investment Authority** (EIA), the answer is that an equity fund should be considered as a banking business; therefore, EIA would not be willing to issue an investment license to an equity fund whose capital is provided by foreign entities.

According to the **National Bank of Ethiopia** (NBE), a foreign equity fund should be allowed to invest and would not be subject to its supervision because it does not display the two distinctive features of banking, that is, collection of deposits and lending. However, even if the NBE’s view proved to be correct, this still leaves unresolved the issue of the financing instruments to be used. As per the above definition of banking, an even partial use of debt instruments by an equity fund in Ethiopia would lead the authorities to consider the fund as a bank, which would then be prohibited, unless capitalized by Ethiopian nationals (as well as subject to NBE licensing and supervision).

Accordingly, the solution adopted by the only foreign-owned fund operating in Ethiopia, **Schulze Global Investments**, is as follows: Schulze does only equity, as the use of quasi-equity would face the fund with the ban on lending or, at best, would trigger the request for an explicit authorization from the NBE (in order to keep the country’s overall external indebtedness low, the law requires that loans from abroad are subject to authorization). The fund management company (a concept not present in Ethiopian legislation) is registered locally as a consulting company while the fund itself is incorporated and sits abroad, with funding released deal by deal. Thus, the fund’s operations are, from a legal point of view, a collection of separate foreign investments.

The ambiguity concerning the (banking or nonbanking) status of equity financing stems from the fact that it is essentially unclear whether

an equity fund squarely engages in any of the activities which, as per above, qualify a business of a banking type. Some regard the operations of the fund as a banking business because, arguably, the fund provides “loans.” In contrast, others argue that, although the fund provides “loans,” it does not involve fund mobilization (saving or deposit service), and it collects dividend from profits of the investment, not interest from loans, thence the view that equity financing is not a banking activity.

Operationally speaking, in order to release each investment, the foreign investor must obtain an **investment permit** from the EIA to operate in Ethiopia. The scope of investment is defined in the investment permit. Investors doing equity on a deal-by-deal basis do not normally have a single investment permit defining, once for all, all the

investment activities in which the investor will be involved, since the investor does not know a priori which are the areas where investments will be made. This means that the investor needs to obtain an investment permit per deal. The permit is principally a legal requirement, although it is also needed to qualify for fiscal benefits.

Finally, in the event that, following the EIA interpretation, a pure equity fund was to be regarded as a banking business, the investor must also and obligatorily obtain a **license from the NBE** (and in such cases the investment is reserved only for Ethiopian nationals). Alternatively, if equity investment is not considered as a banking operation (as per the NBE reading), NBE registration is not required (and, in that case, repatriation of dividends would not be dependent on it, either).

Appendix: Investment Areas Open to Foreign Investors

Under Article 4.1 of the Investment Regulation, a foreign investor⁶⁷ shall be allowed to invest in areas of investment specified in the Schedule attached thereto, except those areas provided for in numbers 1.3.3, 1.4.2, 1.7, 1.11.3, 1.11.4, 5.3, 6.2, 8.2, 9.2, 9.3, and 12 of the Schedule. Accordingly, the following areas are not open to foreign investors:

⁶⁷ Per Article 2.6 of the Proclamation on Investment (Proclamation 769/2012), a "foreign investor" means a foreigner or an enterprise wholly owned by foreign nationals, having invested foreign capital in Ethiopia or a foreigner or an Ethiopian-incorporated enterprise owned by foreign nationals jointly investing with a domestic investor, and includes an Ethiopian permanently residing abroad and preferring treatment as a foreign investor.

Areas Not Open to Foreign Investors

- Finishing of fabrics, yarn, warp and weft, apparel and other textile products by bleaching, dyeing, shrinking, sanforizing, mercerizing, or dressing (Schedule 1.3.3.)
- Tanning of hides and skins below finished level (Schedule 1.4.2)
- Printing Industry (Schedule 1.7)
- Manufacture of cement (Schedule 1.11.3)
- Manufacture of clay and cement products (Schedule 1.11.4)
- Tour operation below grade 1 (Schedule 5.3)
- Construction contracting below grade 1 (including water well and mineral exploration drilling) (Schedule 6.2)
- Provision of kindergarten, elementary, and junior secondary education by constructing own building (Schedule 8.2)
- Provision of diagnostic center service by constructing own building (Schedule 9.2)
- Provision of clinical service by constructing own building (Schedule 9.3)
- Capital Goods Leasing, Excluding Leasing of Motor Vehicles (Schedule 12)

According to the same schedule, the following are the areas of investment open to foreigners:

Areas Open to Foreigners

1. Manufacturing

1.1 Food Industry

- Processing of meat and meat products
- Processing of fish and fish products
- Processing of fruit and/or vegetables feeds
- Manufacture of edible oil
- Processing of milk and/or manufacture of dairy products
- Manufacture of starches and starch products
- Processing of pulses, oil seeds or cereals, excluding flour production
- Manufacture of other food products
- Manufacture of sugar
- Manufacture of chocolate, candy, biscuits and other sweets (excluding ice crème and cakes)
- Manufacture of macaroni, pasta and/or similar products
- Manufacture of baby food, roasted and ground coffee, soluble coffee, tea, yeast, vinegar, mayonnaise, artificial honey, iodized salt, or similar food products
- Processing of animal

1.2 Beverage Industry

- Manufacture of alcoholic beverages
- Manufacture of wine
- Manufacture of beer and/or beer malt
- Manufacture of soft drink, mineral water or other bottled water

1.3 Textile and Textile Products Industry

- Preparation and spinning of cotton, wool, silk and similar textile fibers
- Weaving of textiles (may include spinning and finishing of textiles)
- Finishing of fabrics, yarn, warp and weft, apparel and other textile products by bleaching, dyeing, shrinking, sanforizing, mercerizing, or dressing
- Manufacture of knitted and crocheted fabrics
- Manufacture of made-up textile articles, except apparel
- Manufacture of carpets
- Manufacture of wearing apparel (including sport wears)
- Manufacture of accessories for textile products

1.4 Leather and Leather Products Industry

- Tanning of hides and skins up to finished level
- Manufacture of leather products (luggage, hand bags, leather balls, and similar products)

- Manufacture of leather shoe
- Manufacture of accessories for leather products

1.5 Wood Products Industry

- Manufacture of wood products (excluding saw milling, timber making, and assembling of semi-finished wood products)

1.6 Paper and Paper Products Industry

- Manufacture of pulp
- Manufacture of paper
- Manufacture of paper packages
- Manufacture of other paper products

1.7 Chemical and Chemical Products Industry

- Manufacture of basic chemicals
- Manufacture of fertilizers and/or nitrogen compounds
- Manufacture of plastics and/or synthetic rubber in primary forms
- Manufacture of pesticides, herbicides or fungicides
- Manufacture of paints, varnishes or similar coatings; printing, writing and painting inks and mastics
- Manufacture of soap and detergents, cleaning and polishing preparations perfumes and toilet preparations
- Manufacture of man-made fibers
- Manufacture of other chemical products (propellant powders, explosives, photographic films and similar products)

1.8 Basic pharmaceutical Products and Pharmaceutical Preparations Industry

- Manufacture of inputs of basic pharmaceutical products and pharmaceutical preparations
- Manufacture or formulation of pharmaceuticals

1.9 Rubber and Plastics Products Industry

- Manufacture of rubber products
- Manufacture of plastic products used as inputs for construction of buildings, vehicles or other industrial products; plastic pipes or tubes and fittings used for irrigation and drinking water supply as well as for sewerage system
- Manufacture of other plastic products excluding plastic shopping bags

1.10 Other Non-Metallic Mineral Products Industry

- Manufacture of glass and/or glass products
- Manufacture of ceramic products
- Cutting, shaping and finishing of marble and limestone (excluding quarrying)
- Sound-absorbing or heat-insulating materials
- Manufacture of lime, gypsum and/or similar coatings
- Manufacture of millstone, glass, paper, etc.

1.11 Metals Industry (Excluding Mining of the Mineral)

- Manufacture of basic iron and steel
- Manufacture of basic precious and other non-ferrous metals
- Casting of iron and steel

1.12 Fabricated Metal Products Industry (Excluding Machinery and Equipment)

- Manufacture of structural metal products, tanks, reservoirs and containers or steam generators
- Except corrugated metal sheets for roofing and nails, manufacture of other fabricated metal products (hand tools, articles, and similar products)

1.13 Electronic and Optical Products Industry

- Manufacture of electronic components and boards
- Manufacture of computers and peripheral equipment
- Manufacture of communication equipment
- Manufacture of consumer electronic (television, DVD, radio, and similar equipment)
- Manufacture of measuring, testing, navigating, control equipment or watches and clocks
- Manufacture of medical equipment (irradiation, electro-medical, or electrotherapeutic equipment)
- Manufacture of optical instruments or photographic equipment
- Manufacture of magnetic and optical media

1.14 Electrical Products Industry

- Manufacture of electric motors, generators, transformers or electricity distribution or control apparatus
- Manufacture of accumulators or batteries
- Manufacture of electrical wires or cables (including fiber optics) and related products
- Manufacture of electric lighting equipment
- Manufacture of domestic electrical appliances
- Manufacture of other electrical equipment

1.15 Machinery/Equipment Industry

- Manufacture of general-purpose machinery (motor, lifting and handling equipment, pumps and similar)
- Manufacture of special-purpose (for agriculture, food processing; beverage, textile and mining production and similar activities) machinery

1.16 Vehicles, Trailers, and Semi-trailers Industry

- Manufacture of motor vehicles
- Manufacture of bodies/components for motor vehicles, trailers and/or semi-trailers
- Manufacture of parts and accessories for motor vehicles
- Manufacture of railway locomotives and rolling stock
- Manufacture of other transport equipment (boats, bicycles, motor bicycles and similar equipment)

1.17 Manufacture of Office and Household Furniture (excluding those made of ceramic)

1.18 Manufacturing of Other Equipment (jewelry and related articles, musical instruments, sports equipment, games and toys and similar products)

1.19 Integrated Manufacturing, with Agriculture

2. Agriculture

- Crop Production
- Annual crop Production
- Growing of cereals, leguminous crops and/or oil seeds and rice
- Growing of vegetables and/or herbs
- Growing of fiber crops
- Growing of other annual crops (animal feed, medicinal crops, aromatic, spices and similar crops)
- Production of certified seed
- Growing of medium-term crops
- Growing of flowers
- Growing of medium-term fruits (strawberry, blueberry and similar crops)
- Growing of medium-term spices, aromatic and/or medicinal crops (hulu, curmuma, black pepper and similar crops)
- Perennial Crops Production
- Growing of perennial fruits (mango, avocado, banana, orange, papaya, grapes, passion fruits and similar crops)
- Growing of beverage crops (coffee, tea and similar crops)
- Growing of other perennial crops (rubber tree, palm, jatropha, and similar crops)
- Animal production
- Farming of domestic animals and production of milk, eggs, raw wool and similar products
- Farming of wild animals and production of milk, eggs and similar products
- Farming of bees/production of honey
- Production of Silk
- Fish farming in artificial ponds (aquaculture)
- Mixed (crop and animal) farming
- Forestry

3. Information and Communication Technology Development in Areas to Be Determined by Directives to Be Issued by the Ministry of Communication and Information Technology

4. Electricity Generation, Transmission and Distribution

5. Hotel and Tourism

- Star-designated hotel (including resort hotel), motel, lodge and restaurant
- Grade 1 tour operation

6. Construction Contracting

- Grade 1 construction contracting (including water well and mineral exploration drilling)

7. Real Estate Development

8. Education and Training

- Provision of secondary and higher education by constructing own building
- Provision of technical and vocational (including sports) training service

9. Health Services

- Provision of hospital service by constructing own building

10. Architectural and Engineering Works, Technical Testing and Analysis

- Architectural and engineering works and related technical consultancy services
- Technical testing and analysis

11. Publishing

12. Import Trade

- Importation of LPG and bitumen

13. Export Trade

- Export trade excluding exporting of raw coffee, 'chat,' oil seeds, pulses, precious minerals and hides and skins bought from the market; natural forestry products and live sheep, goat, camel, cattle and equines not raised by the investor

14. Wholesale Trade

- Supply of petroleum and its by-products as well as wholesale of own products

