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FS SERIES #8: RURAL AND AGRICULTURAL FINANCE FOR FOOD SECURITY

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FS SERIES #8: RURAL AND AGRICULTURAL FINANCE FOR FOOD SECURITY

CONTENTS

ACRONYMS

ARFC	Afghan Rural Finance Company
ATM	automated teller machine
ARIES	Agriculture, Rural Investment and Economic Strengthening
BDS	business development services
CGAP	Consultative Group to Assist the Poor
DCA	Development Credit Authority
DECT	Dowa Emergency Cash Transfers
DRC	Democratic Republic of the Congo
EGAT	Bureau for Economic Growth Agriculture and Trade
FAO	Food and Agriculture Organization
FFH	Freedom from Hunger
FS Share	Financial Sector Knowledge Sharing Project
LPG	loan portfolio guarantee
MFI	microfinance institution
RAF	rural and agricultural finance
SME	small- and medium-sized enterprise
VCF	value chain finance
WFP	World Food Programme
WOCCU	World Council of Credit Unions
YED	Youth and Enterprise Development

INTRODUCTION

In 2008, USAID's Bureau for Economic Growth Agriculture and Trade (EGAT) created the Financial Sector Knowledge Sharing Project (FS Share). This project was designed specifically to collaborate with USAID missions to develop effective and efficient financial-sector programs that increase access to financial services and develop well-functioning markets globally. USAID awarded Chemonics International Inc. the FS Share delivery order under the Financial Sector Blanket Purchase Agreement. FS Share has a three-year period of performance, July 2008-2011.

Through the FS Share task order, USAID EGAT and Chemonics proactively collaborate with missions to identify financial-sector priorities and develop strategies and programs for growing the financial sector. FS Share identifies financial-sector best practices and aggregates them through model scopes of work, primers, diagnostic tools, best-practice case analyses, and other tools. These deliverables are disseminated to USAID missions for use in financial-sector programs. FS Share can also assist with implementation and connect mission staff to external resources on best practices. In response to mission demand, FS Share delivers presentations and other knowledge-sharing endeavors.

Objective of This FS Series

The objective of this FS Series, "Rural and Agricultural Finance for Food Security," is to provide U.S. government program designers with a tool to develop effective programming for integrating rural and agricultural finance (RAF) into USAID-supported food security strategies for vulnerable countries. The FS Series includes a primer, a diagnostic checklist, and a model scope of work. The primer introduces, defines, and provides an overview and case examples of RAF for food security. The suggested interventions have the objective of stimulating discussion and knowledge sharing on finance for food security and do not offer a definitive approach for U.S. government program designers.

This FS Series was developed by Rural and Agricultural Finance Expert Anita Campion of AZMJ and Food Security Expert Roberta van Haeften, with support from Michelle Cassal of Chemonics International Inc. It was reviewed by the FS Share project management team and several external reviewers.

FS Share Rapid Response Hotline

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EXECUTIVE SUMMARY

The objective of this primer is to assist U.S. government program designers to develop effective approaches for integrating RAF into food security-oriented strategies and programs. Food security, using USAID's definition, is achieved "when all people, at all times have both physical and economic access to sufficient food to meet their dietary needs for a productive and healthy life." When designed in response to market demands, RAF can help reduce food insecurity in a cost-effective manner by increasing the end-client's assets and income.

In selecting which RAF approaches to use to address food security concerns, one must first consider the nature of food insecurity and the extent to which a lack of access to RAF is hindering food access, availability and utilization. RAF approaches are often not appropriate where markets are not working, such as during a short-term transitory food security crisis resulting from natural disaster. While food security issues are often urgent, RAF programs should, to the extent possible, emphasize ex-ante more than ex-post solutions to poverty and food insecurity. In other words, apply preventive measures to keep food insecurity from worsening and measures to help those who are already food insecure. Furthermore, food-insecure populations often require additional assistance, such as asset-building grants and skills training, before they will be able to benefit from access to credit.

The international development field still has a lot to learn about RAF and how best to leverage its use to improve food security. Knowledge is particularly limited on how to mitigate the risks of agricultural finance, especially long-term investments, for which funding sources are scarce. Nonetheless, there are RAF approaches that can reduce food insecurity, which is especially prevalent among the rural poor.

Based on the research and case studies analyzed for this FS Series, core lessons are emerging to support effective programming of RAF initiatives for food security. Specifically, programmers should:

Carefully design RAF to address the needs of the food insecure. By marrying the results of the food security assessment with the RAF assessment, programmers can identify and prioritize potential approaches. The food insecure are rarely immediately creditworthy, so programmers should consider RAF approaches that initially focus on savings and insurance. The RAF assessment should include an assessment of supply and demand, which should not wait until the program implementation stage. If there are significant meso- or macro-level constraints to expanding access to RAF, such as the need for a credit bureau or new law, those interventions should begin early, because they often take a long time to resolve.

Apply holistic and cross-sectoral approaches to maximize value. To improve food utilization, technical assistance and training is often needed to complement RAF. Local and international experts in agricultural development, economic growth, and food security should be on the assessment, design, and implementation teams to ensure different perspectives are considered.

Do not forget small farmers and staple crops, but apply a broad approach to food security. A broad approach to food security should also include assistance to larger actors in agricultural

value chains and for competitive, high-value products. Though these larger actors do not usually include the food insecure, their access to RAF often results in new jobs and opportunities for the food insecure and other rural poor. VCF, such as lending between a processor and its suppliers, can also be used to demonstrate profit potential to financial institutions and how agricultural market knowledge can be used to mitigate risk.

Make special efforts to target rural women and youth. These populations tend to be particularly vulnerable to food insecurity. By designing RAF to meet their specific needs, rural women and youth are more likely to benefit at an equal if not greater level than less vulnerable populations. Information technology (e.g., automated teller machines, or ATMs, smart cards and mobile-phone banking) can be used to reduce the costs of expanding RAF to rural areas.

To the extent possible, RAF programs should attempt to avoid making the mistakes of the past (e.g., over-subsidizing and distorting markets) and focus primarily on developing market-driven solutions. In some food insecure areas, especially where markets are not functioning, the need or urgency might be such that temporary incentives are justified to jump-start RAF markets or entice commercial providers to offer RAF. In such cases, however, incentives should be designed to avoid market distortions or disincentives for commercial RAF providers to enter once markets are functional.

PRIMER

This primer's objective is to provide U.S. government program designers with a basic technical understanding of food security and how to use RAF approaches to contribute to food security objectives. It defines food security and RAF broadly, and describes how they intersect and can be mutually reinforcing. This primer is based on a review and analysis of existing literature and resources, multiple cases, and approaches used to implement USAID and non-USAID programs. It highlights the most common lessons learned and relevant trends.

Section A defines food security and describes a conceptual framework, which includes approaches to improve food availability, access, and utilization. It discusses the time dimension of food security, and distinguishes transitory from chronic food insecurity. The section concludes with a discussion on how programmers can identify and describe food insecurity, including common indicators used to measure it and monitor changes.

Section B defines RAF as all types of finance available to farmers, rural households, and rural and non-rural agricultural-based enterprises, which include savings, insurance, leasing, and lending. RAF, however, does not include other common approaches to transitory food insecurity, such as the use of grants and cash for work programs. This section discusses the common retail products and providers of RAF, as well as the range of meso-level support institutions and infrastructure that reinforce its effectiveness in serving the food insecure. Furthermore, it discusses how the legal and regulatory environment can impact RAF. The section concludes with a description of USAID's role in supporting RAF, including the use of its Development Credit Authority (DCA).

Section C proposes how RAF can be used to support food security programs and initiatives. In particular, it discusses how RAF approaches, related to microfinance, small- and medium-sized enterprises (SMEs,) VCF contribute to food security. It also addresses the common constraints to using RAF to reduce food insecurity and how to overcome them. It highlights important elements to consider when designing and implementing RAF approaches to reduce food insecurity, including initial assessment and monitoring and evaluation.

Section D presents case studies that highlight RAF approaches that are applicable to addressing food insecurity, especially among the rural poor.

Section E summarizes core lessons learned and presents key findings related to emerging best practices and potential for replication in other countries.

Annex A contains a glossary of key terminology. References are listed in Annex B. Annex C presents a diagnostic checklist to assist U.S. government programmers with evaluating the preconditions and options available to integrate finance effectively to reduce food insecurity.

Annex D has a model scope of work that provides sample language for program designers and implementers.

The checklist and model scope of work are intended to be practical tools for applying the lessons learned in integrating RAF into effective food security programming.

A. Framework for Food Security

Food security is not a new concern within USAID. However, the agency recently increased its emphasis on food security in response to the rising food prices in 2007 and 2008, making improved food security a humanitarian and development priority.

A1. Definition of Food Security

USAID defines food security as: “When all people, at all times have both physical and economic access to sufficient food to meet their dietary needs for a productive and healthy life” (USAID, 1992, p. 1).[1]

Similar to definitions used by the United Nations’ agencies and the World Bank, this definition emphasizes the accessibility of food or effective demand. Earlier definitions focused more narrowly on food availability (i.e., food supply).

A2. U.S. Government Objectives

The U.S. government’s objective and approaches to achieving food security are laid out in the “Global Hunger and Food Security Initiative Consultation Document,” (Bureau of Public Affairs, 2009) and in the food security pages on the Department of State and USAID Web sites (USAID, n.d.d.). According to the State Department, the U.S. government is committed to improve food security, “working as part of a collaborative global effort centered on country-led processes.” The objectives of this effort are to reduce hunger sustainably, raise the incomes of the rural poor, and reduce the number of under-nourished children.

A3. Basic Concepts

Food security is commonly thought to have three distinct but interrelated elements that are essential for it to exist: availability, access, and utilization. Many also emphasize the importance of stability (in food supplies and in the ability of households and individuals to access and utilize food over time), which implies the ongoing need to mitigate risks and vulnerabilities related to food insecurity.

Food availability. Food availability can be a problem at the national, household, or individual levels. A country cannot achieve food security unless available food is sufficient to supply everyone in the country with a diet that is adequate in terms of quantity, quality, and diversity. This food can be produced domestically, imported commercially or through concessional aid programs, and, in the short term, drawn from stocks. The amount of food available in a country can be increased by increasing the amount of food produced (through increases in areas planted and/or productive yields) and/or reducing post-harvest losses. Increasing net imports is also important for countries that do not have a comparative advantage in food production. In a world more and more integrated through trade and political-economic ties, global availability of food (i.e., staples and non-staples) is of greater and greater importance to household food security. Availability of food at the household level also requires availability in local markets, which requires relatively smooth market operations, functioning infrastructure, and a free flow of information. The absence of or poorly functioning markets can have adverse effects on attempts

[1] The definition, adopted by the 1996 World Food Summit, also includes the concepts of “safe” and “nutritious” food, and food that meets people’s “dietary preferences.”

to increase food availability, making food imports more difficult and expensive and discouraging increases in domestic production. For example, farmers will not have an incentive to invest in producing more food if they cannot sell their surpluses at reasonable prices. They will also be reluctant to specialize in more profitable food, non-food crops, and livestock if they fear they will not be able to access the basic foods they need for their own consumption in local markets.

Food access. To achieve food security, individuals and households must have the ability (i.e., purchasing power) to acquire sufficient food for a nutritious diet. Some households are able to produce sufficient food. Others rely on earnings from farm and non-farm activities, income transfers, and/or food subsidies; this population includes resource-poor farmers with little or poor-quality land, landless laborers, and the urban poor. Agricultural development programs that focus solely on increasing the production of basic staples and/or ignore resource-poor farmers and landless laborers, whose primary problem is a lack of purchasing power, may achieve their production objectives but have limited impact on the quality of diets and the underlying problems of the food insecure.

Access also has relevance at the national level. If a country earns sufficient foreign exchange from exports, it does not matter if it produces enough food to feed its population directly because it can buy what is needed on the international market. In other words, when markets are functioning well, a country can be food-secure without attempting to achieve national food self-sufficiency, which can be counter-productive.

Food utilization. People also experience food insecurity when they fail to consume proper diets, even when food is available and accessible. Food insecurity can also occur when people consume proper diets, but poor health prevents their bodies from absorbing sufficient nutrients. Improper food utilization can result from personal tastes; culture; peer pressure; lack of nutritional knowledge; inadequate processing and storage; inadequate food labeling; misleading advertising; and lack of access to or utilization of health, water, and sanitation services.

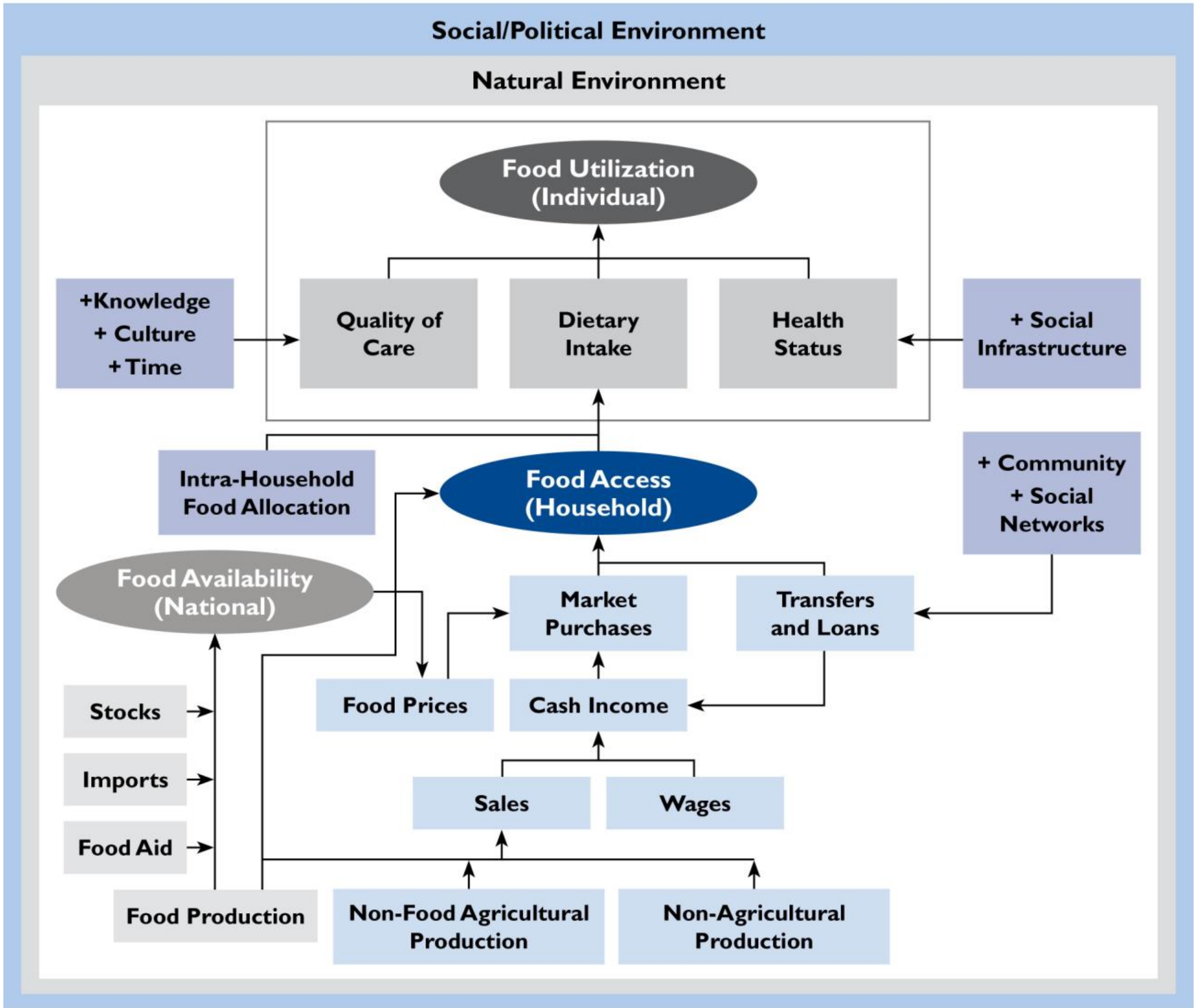
These three elements and their inter-relationships are shown in Figure I (next page). Food availability (the left oval) is influenced by, for example, food stocks, imports, food aid, and food production. Food production also influences food access (the center oval), but food transfers and market purchases (influenced by food prices and cash income from agricultural sales and/or wages) also play an important role. This framework makes clear that food utilization is dependent on other factors, including the availability and quality of health services, dietary intake, knowledge, and cultural practices. These factors explain why high levels of malnutrition can continue to exist in countries and communities that produce — and even export — significant quantities of food. In other words, food security is a complex and multi-sectoral issue.

Given this complexity, risk and vulnerability are now also taken into account while assessing food security problems and devising appropriate responses.[2] Countries, communities, and

households are exposed to many risks, including **economic shocks**, such as the 2007 price shocks, and the ensuing financial crisis and global recession; **natural shocks**, such as climate

[2] For example, USAID's Office of Food for Peace added these concepts to the Food Security Framework that it developed for its 2006-2010 "Strategic Plan."

Figure 1. Food Security Conceptual Framework



Source: Adapted from Riely, Mock Cogill, Bailey and Kenefick, 1999

shocks, natural resource degradation, and yield volatility; and **social and health risks**, such as epidemics, corruption, and conflict. When countries, communities, and households are unable to effectively manage these risks, food availability, access, and utilization can be threatened (i.e., become unstable), increasing vulnerability to negative consequences.

A4. Time Dimension of Food Insecurity

In theory, there are two distinct types of food insecurity: chronic and transitory. In reality, these are closely entwined. Chronic food insecurity is characterized by a consistently inadequate diet caused primarily by poverty. It affects countries and households that persistently cannot acquire food by producing it themselves, buying it, bartering for it, borrowing it, sharing it, etc. Transitory food insecurity, on the other hand, is a temporary decline in a country's or household's access to food. At the country level, transitory food insecurity results from instability in food production, which can result from natural shocks (e.g., droughts, floods, and hurricanes), and/or from civil disturbances. At the household level, it results from instability in production, household incomes, employment, or food prices. In its worst form, transitory food insecurity can result in famine. The chronically food insecure, however, are often the most vulnerable and most negatively affected by transitory food insecurity. The 2010 earthquakes in Haiti are an example.

A5. Identifying and Describing the Food Insecure

To understand the nature of food insecurity, programs generally begin by conducting an assessment to identify and understand the food insecure: who they are, where they live, and what their livelihoods are. Different organizations are involved in identifying and describing the characteristics of the food insecure at the country level and within countries. Information is available from the Food and Agriculture Organization (FAO) and the International Food Policy Research Institute, for example, on how countries rank in terms of their levels of food insecurity (FAO, 2009; IFPRI, 2009). Other organizations, including the World Food Program (WFP) and USAID (USAID, n.d.b.; WFP, n.d.), have conducted food security assessments for specific countries. Many use indicators that were developed for other purposes as proxies for the three dimensions of food security. (See examples in Table 1.) Work is also underway to develop new indicators for measuring food access, including dietary diversity scores and household food access scales (USAID, n.d.f.).

Table 1. Sample Indicators by Food Security Component

Component	Indicators
Food availability	Number of calories available in a country per person (estimates from FAO and individual countries)
Food access	Percent of population living in poverty and extreme poverty (estimates from the World Bank and individual countries)
Food utilization	Percent of children under age 5 malnourished (estimates from USAID-supported household demographic and health surveys)

B. Rural and Agricultural Finance

RAF can be a useful and cost-effective tool to assist in reducing food insecurity, because it can link the poor to financial products and institutions that can help them increase assets and income. Also, food production, processing, and distribution may be impaired by a lack of financial resources to fund agricultural inputs, land management, harvesting, storage, processing, and distribution. This can undermine food security. The U.S. government’s “Global Hunger and Food Security Initiative Consultation Document” recognizes the importance of RAF as one tool to support food security, but discusses it primarily in the context of increasing access to financial services. The document argues that “inadequate rural finance constrains the ability of small producers and agro-industries to invest in productivity and expand operations” and commits the U.S. government to supporting “rural microfinance, community savings groups, and innovative insurance mechanisms to reduce the risk of agricultural finance, weather-indexed insurance and financial sector reforms that result in greater lending and growth” (Bureau of Public Affairs, 2009).

B1. Definition of RAF

For the purposes of this paper, therefore, RAF is defined as including all types of finance available to farmers (e.g., production credit through banks, agricultural credit associations and cooperatives, and value chain actors), rural households (e.g., microfinance and village savings and loan associations) and rural and non-rural agricultural-based enterprises (e.g., SME and VCF). Some define RAF broadly to include, for example, trade finance (because of its role in facilitating food imports) and infrastructure finance (such as for rural roads, because of their importance to domestic food distribution). While all these types of finance are relevant to food security, this document focuses primarily on the RAF livelihoods and services that have a more direct impact on the food insecure, their productivity, incomes, and access to food (see Table 2). Nonetheless, RAF activities that serve large agricultural producers and SMEs can have a significant indirect impact on the food insecure by creating jobs and opportunities for them, and increasing food production (improving food availability) or improving efficiency (lowering costs for improved food access).

Table 2. Rural Livelihoods and Finance that Support Food Security

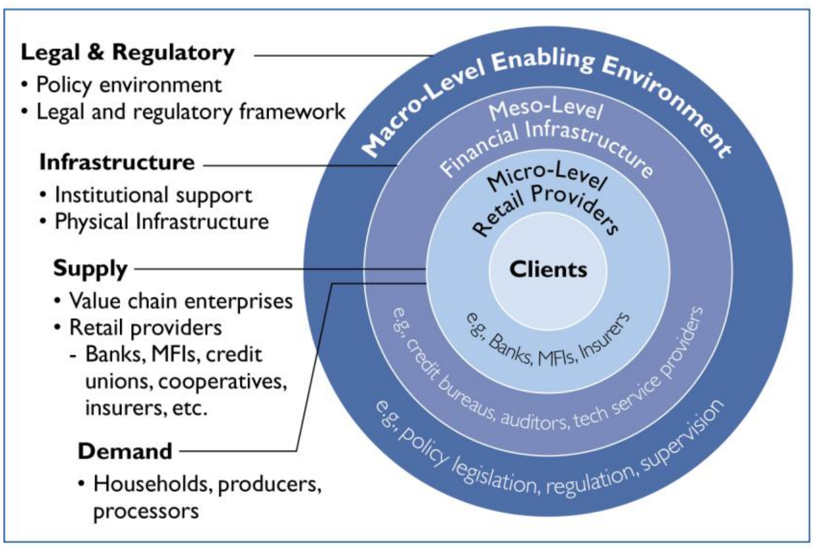
	Rural Economic Activities/ Livelihoods	Applicable RAF Services (from Less to More Formal Financial Services)	Comments
Includes Direct Support to the Food Insecure	Wage workers, including off-farm and on-farm	Community finance (e.g., rotating credit and savings associations, village banks)	Emphasis on savings and loans likely to be used to help smooth consumption.
	Micro businesses (non-farm)	Community finance, microfinance	Savings and loans are frequently used to buy inventory to grow business and help smooth consumption.
	Agricultural producers with marginal asset bases (e.g., land, animals)	Community finance, microfinance	Many microfinance institutions (MFIs) do not lend to farmers unless the household has other sources of income to accommodate their frequent repayment cycles. Savings are important because most loans are not designed for agriculture.
Indirect Support to the Food Insecure	Agricultural producers with asset bases that are small but economically viable (e.g., small farmers)	Agricultural loans from cooperatives/credit unions or rural banks, VCF, equipment leasing, warehouse receipts finance, insurance	This group needs operating and investment capital to buy inputs (e.g., seeds, fertilizer) and equipment (e.g., plows, irrigation pumps). When available, loans usually require collateral or other guarantees.
	Agricultural producers with larger asset bases (e.g., medium and large farmers)	Agricultural loans from cooperatives/credit unions or rural banks, VCF, commercial bank loans, trade finance, insurance, trusts, warehouse receipts finance	This group needs operating and investment capital and can be a source of additional on-farm jobs.
	SMEs	Commercial bank loans, VCF, insurance, equity investments	SMEs need operating and investment capital. They can be a source of additional off-farm jobs and provide finance to other actors in the value chain.

Rural and agricultural finance face unique risks and challenges beyond those typically found in financial markets. In particular, providing finance to rural areas raises transaction costs, because populations are generally smaller and more disbursed in rural areas. Agricultural finance is also exposed to risks associated with weather and inappropriate government interventions, such as politically motivated price controls and debt forgiveness.

B2. RAF Framework

Figure 2 presents the framework that USAID generally uses to discuss financial system development, which includes initiatives at the micro level (e.g., providers of RAF), the meso level (e.g., RAF support and infrastructure) and the macro level (e.g., the legal and regulatory framework for RAF). RAF clients, who create the demand for RAF, include the food insecure and those whose increased access to finance could help reduce food insecurity for others (e.g., food producers, input suppliers, traders, storage providers, processors, packagers, and distributers). Using this systemic approach to increase RAF availability and access, rural and agriculture-related enterprises can benefit from more choices of RAF products and services, usually at better terms, including lower interest rates, longer repayment periods, and lower transaction costs.

Figure 2. Framework for Rural Financial System



Source: USAID, n.d.a.

B2a. RAF Providers and Products

Designing effective programs to facilitate better access to RAF begins with a clear understanding of its many actors. It also requires understanding the relationships among these actors in rural areas and in agricultural value chains, and the types of products they provide. RAF products and services also need to reflect the diversity of clients, who can range from poor rural households that depend on agriculture to varying degrees to sophisticated agro-industrial firms in urban or semi-urban areas (Chalmers, 2005, p. 2).

The products commonly demanded by rural non-farm and agriculture-related enterprises are highlighted in Table 3. Table 4 shows common providers of those products, the clients they typically serve, and potential market niches.

Table 3. RAF Product Demand by Enterprise Type

Rural Non-Farm (often represent most food insecure)	**Agriculture-Related Enterprises**	
	On-Farm (combination of food insecure and food secure producers)	**Off-Farm** (mostly food secure, but play a role in facilitating food availability and access)
Micro and small loans (can be shorter-term with frequent repayments), rural micro-savings, leasing, micro-insurance, cash transfers and remittances	Medium-sized loans (longer-term and seasonal with grace period), rural savings, leasing, warehouse receipts lending, insurance, direct VCF	Small, medium and large loans, lines of credit, savings, leasing, insurance, direct and indirect VCF, as well as corporate bonds and equity investments in larger firms

Source: Adapted from Campion & Charitonenko, 2003, p. 5.

Table 4. Providers of RAF Services

RAF Provider Type	Typical Clients	Typical Products	Potential Market Niche
Commercial banks	Medium to large enterprises	Short to medium-term loans, savings, others	Lending to exporters, agro-processors
State-owned agricultural development banks	Medium to large farmers and agricultural cooperatives	Medium to long-term loans	Lending to agricultural producers to fill gap not served by commercial banks
MFIs (Commercially-oriented, or community-based)	Micro and small enterprises, poor households, and some small farmers and producers groups	Short -term loans, savings, payment services, etc.	Lending to small and micro producers and producer groups; savings
Agricultural cooperatives and credit unions	Rural households, micro/small producers	Short, medium-term loans; savings	Lending to micro/small producers; micro-savings
Insurance companies	Mostly medium to large farmers and firms	Crop and index-based insurance	Mitigation and transfer of risks related to agriculture
Community finance (village banks, unit banks, ASCAs, ROSCAs, etc.)	Rural households, micro/small producers	Short, medium-term loans; savings	Lending to micro/small producers; micro-savings
Value chain actors (often processor or wholesaler)	Farmers and smaller firms linked to value chain financier	Short to medium-term loans, savings, others	Lending to producers/suppliers or distributors within growing value chain

Source: Adapted from Chalmers, 2005, p. 3.

While many think of RAF as primarily credit, the realities are that rural lending is often not the best starting point for the food insecure and agricultural finance is particularly challenging. Box 1 (next page) highlights some of the main challenges financial institutions face in offering agricultural finance. (See Table 8 on page 19 for the specific risks of agricultural lending.)

On the other hand, rural savings mobilization is very important to food security, because households use savings to manage emergencies, prepare investments, and smooth consumption. The rural poor can and do save, often in illiquid assets, such as livestock or gold, which are risky because they can be damaged or stolen. Formal financial institutions can benefit from mobilizing savings by diversifying and lowering their cost of funds (Buchenau, 2003, p. 19).

Insurance is also an important part of any RAF strategy, because insurance markets are generally less developed than banking, which limits the growth of the financial sector and the economy as a whole (Webb, 2006, p. 24). Box 2 highlights how index-based insurance can be used to reduce risk associated with agricultural credit without the usual problems of moral hazard associated with crop insurance.

Box 1. Challenges of Agricultural Finance

- Lending to agriculure is seasonal and co-variant in communities, which causes liquidity management challenges.
- Market interventions, such as interest rate controls, subsidized credit, and ad-hoc debt forgiveness, distort markets and discourage formal financial institutions from offering agricultural finance.
- Financial institutions have limited abilities to assess and mitigate full risks involved with agricultural lending.
- Lending for staple crops is especially difficult, because they usually offer low returns, and are vulnerable to global price fluctuations and politically-motivated market interventions.

Each provider type has its strengths and weaknesses, some of which include:

Commercial banks. Though commercial banks often have the funds and resources to offer RAF, they tend to resist lending for agriculture, which they consider high risk. When they do offer agricultural finance, they require significant collateral (e.g., land title, equipment, machinery, and cash), which the rural poor often lack. Banks sometimes have rural branches, but rarely focus on offering small loans or savings accounts, due to the higher transaction costs of serving those markets. Smaller rural banks can benefit from enhanced knowledge of local markets, but are often resource and capacity constrained.

State-owned agricultural development banks. These financial institutions can play an important role in filling the gap left by commercial banks and prime the pump of agricultural value chains. However, parastatals (i.e., state-owned entities) are often subject to political influences, which can have market-distorting affects, such as debt forgiveness, which undermines repayment incentives and portfolio performance.

Box 2. Index-Based Insurance

Index-based insurance uses a proxy measurement to pay for significant economic loss. For example, if it is known that extreme rainfall or temperatures are highly correlated with production losses, then these measures can be used to proxy loss and make payments. This design helps solve problems associated with the usual public-sector response to catastrophic risk and credit constraints in developed countries, namely traditional forms of agricultural insurance and *ad hoc* disaster aid, both of which suffer from problems of moral hazard (Barnett & Mahul, 2007).

MFIs. Due to their social mission, commercial and nonprofit MFIs tend to be development-oriented and, therefore, are often interested in serving the needs of the rural poor. While some of them have developed efficient mechanisms (e.g., character and cash flow-based lending) and innovative technologies to reduce transactions costs of serving rural areas (e.g., branchless banking and mobile banking), few have the appropriate resources, management information systems, or methodologies to provide agricultural finance (e.g., larger and longer-term loans that require seasonal grace periods rather than an MFI's typical weekly or monthly repayment schedule). Some MFIs support rural, non-farm enterprises that are often linked to competitive rural and agriculture value chains, and that provide goods and services in rural communities.

Agricultural cooperatives and credit unions. These can reduce finance costs by pooling resources among their members/owners. Because they are usually dependent on savings —which may be drawn down during the crop cycle to pay for inputs and family expenses — lendable funds tend to be insufficient to fully address seasonal credit demand in rural areas.

Insurance companies. Insurance companies have longer-term funds; if the market is large enough, they can offer viable mitigation and transfer of agriculture-related risks. However, global reinsurance markets need to develop more for small countries to adequately transfer risks to international markets.

Community finance. In addition to formal institutions, there are community-initiated financial solutions to RAF, including accumulating savings and credit associations, rotating savings and credit associations, unit banks, village banks, and self-help groups. These solutions often evolve to address an unmet local need for RAF and are usually as strong as the resources and connections available within the community to support them. As they grow, they are often constrained by local capacity, which is generally limited.

Value chain actors. Sometimes large or lead firms, such as processors or wholesalers, lend to other actors within their value chain to address a capacity constraint or facilitate their own growth. Few direct value chain financiers, however, have information systems to monitor their financial portfolio as closely as financial institutions do. Most direct value chain financiers would prefer to facilitate access to formal finance when possible, because they often have other investments they could make to further their growth and development.

B2b. RAF Support and Infrastructure

RAF development also depends upon a number of support institutions and infrastructure (referred to as the meso-level of the financial system). While not direct providers of retail rural and agricultural finance, support institutions assist in improving the knowledge available to RAF providers and the quality of their services. Table 5 describes the common institutions and infrastructure that can support RAF. The ability of RAF providers to serve rural clients also depends on the quality and costs of infrastructure, including roads, electricity and Internet connectivity, as well as the quality of social services, such as health care and education.

Table 5. Common RAF Support Institutions

Institutional Type	Description
Bank-training institutions	Provide training to assist bankers in making prudent and profitable decisions. Introduce new methodologies and information to keep banks up to date with industry laws and standards. Often set up as a member association with dues, but also charge fees for services. May be sponsored by the Central Bank.
MFI networks	Member associations for microfinance providers, which often provide advocacy and knowledge-management services for the sector. Sometimes conduct research and provide training and technical assistance to their member MFIs. Generally collect member dues, but rely heavily on donor funding.
Credit bureaus and credit-reporting agencies	Can provide information on client credit history and current client indebtedness, which can reduce credit risk and protect clients from over-indebtedness. The more comprehensive and inclusive of all types of financial institutions, the more effective they are in reducing risks. Credit bureaus may include only negative information, which helps avoid borrowers with bad credit histories. Others also track positive

Institutional Type	Description
	information, such as the number and amount of current loans, which helps to assess client indebtedness. Often participation is government mandated. Services are usually paid for by participants based on total assets and/or by usage.
Agricultural extension agencies	Provide agricultural expertise primarily to farmers in an effort to increase production, diversify crops, improve yields and efficiency and introduce new technologies. Can facilitate links to RAF providers, value chains, and exports. Often part of government or government-subsidized.
Business development service (BDS) providers	Can help RAF clients strengthen their business, through improved management, products, and processes to improve their creditworthiness. Can also provide training and technical assistance to strengthen RAF providers and assist their clients in presenting their business opportunities. Can be private-sector (e.g. accounting firm) or nonprofit. Though some value chain actors embed technical services in their product and service pricing, most BDS providers rely on fees for services. Donor funding is often needed to develop new products or other innovations. Delivery of the services should be commercially viable by the BDS to the extent possible.
Other consulting firms	In addition to BDS, can offer expert assistance to RAF, ranging from agriculture and finance expertise to information and technology specialists. For insurance, actuarial firms are important to provide the statistical data needed to assess risk.

B2c. RAF Legal and Regulatory Framework

At the macro level, there are several legal and regulatory considerations for RAF to be effective. Because regulators are primarily concerned with protecting depositors, most inspectors focus on ensuring that deposit-taking financial intermediaries (i.e., institutions that on-lend deposits) are financially sound. Because agricultural lending is generally considered to be riskier than commercial lending, the legal and regulatory environment often hinders the expansion of RAF, by requiring higher provisions against potential loan losses, for example.

Some of the most common constraints to RAF savings, lending, and insurance are summarized in Table 6 on the next page. To deal with such constraints, an international RAF policy specialist can be paired with a local legal and regulatory specialist to ensure that international best practices are considered while factoring in the local culture and realities behind the country's current legal and regulatory framework. The ability to resolve macro-constraints is often limited by the government's revenues and ability to provide on-going and effective oversight. Box 3 highlights how USAID is improving RAF through policy initiatives in Ghana.

Box 3. USAID/Ghana Improves RAF Enabling Environment

USAID is improving the enabling environment for modernizing the agricultural sector and strengthening the private sector's capacity to produce quality agricultural and agro-processed products. USAID promotes policy reform to sustain macroeconomic stability and makes markets for produce and inputs, such as fertilizer and seeds, more efficient through trade liberalization. USAID is also promoting reforms to financial, labor, and land policies so they enhance competition. The program provides assistance to horticultural SMEs to help meet regulatory and market-driven standards and attract foreign investment. Funds generated from the sale of commodities made available through the USAID-managed Title II Development Assistance Program (monetization proceeds) are used to support sustainable development projects, such as training in improved methods of agriculture and expanding microcredit to farmers to increase rural income (USAID, n.d.h).

There are additional RAF constraints that need to be addressed for other types of products and approaches. For example, to expand rural leasing, the USAID Uganda Support for Private Enterprise Expansion and Development project worked on improving leasing laws to increase the tax advantages to offer leasing, resulting in many financial institutions entering the leasing market. The USAID Trade Mali project developed an informal approach to get around Mali's lack of legal and regulatory framework to support a formal warehouse receipts system. The project designed a simple storage system for unrefined rice, which farmers then used to guarantee their loans (USAID, 2007, p. 1).

Table 6. Legal and Regulatory Constraints for Savings, Lending, and Insurance

Rural Savings Constraints	RAF Lending Constraints	RAF Insurance Constraints
• Few licensed financial institutions have rural branches • Microfinance NGOs not legally allowed to mobilize savings • High minimum capital requirements make it difficult for microfinance NGOs to transform into formal financial institutions; they lack the expertise and systems for mobilizing savings • Clients distrust government's ability to oversee and protect their deposits • Deposit insurance too expensive for most developing countries	• Few licensed financial institutions have rural branches • Rural land often lacks title, needed for collateral • Some countries do not allow moveable property to be registered and used as collateral • Many court systems are weak, making contracts hard to enforce • Cost of supervising formal financial institutions discourages diversity of actors and products • Governments and donors often distort markets by subsidizing agriculture, forgiving debt, or directing credit.	• Many insurance markets undeveloped and under-regulated, which limits links to international reinsurance markets and raises risk and costs to the insured • Many court systems are weak, making contracts hard to enforce • Cost of supervising formal financial institutions discourages diversity of actors and products

B3. USAID's Role in Supporting RAF

USAID's efforts in this area date to the 1950s and 1960s, when many experiments were made to address the market's lack of response to the needs of rural and agriculture-related enterprises. At its Spring Review of Small Farmer Credit in 1973, USAID acknowledged that many of these experiments failed because the use of subsidies and targeted lending often distorted markets and curtailed private-sector interest (Von Pischke, Donald, &Adams, 1983, p. xiii). These mistakes represent important lessons learned; today, USAID focuses on identifying how best to support rural and agricultural markets without damaging market mechanisms.

At the micro-level, USAID often uses a two-pronged approach to expand the supply of RAF, including to the poor. First, it develops financial institutions to become more effective RAF providers. Second, it works with value chain actors to link them to financial services, either within the value chain or from a financial institution. RAF development programs also usually work at the meso and macro levels to ensure an enabling environment for the retail providers. In Peru, for example, Global AgRisk worked with the Peruvian Bank Supervision Agency to develop legislation and regulation to support the implementation of index-based insurance. Nonetheless, finance can be integrated as a component to reinforce just about any program.

B3a. Overview of USAID support

USAID has increasingly used RAF activities in all regions of the world, from comprehensive financial- sector development programs, such as the Agriculture, Rural Investment and Economic Strengthening (ARIES) program in Afghanistan, to small pilots or components of other programs, such as part of the one-year Youth Enterprise Development (YED) pilot in the Democratic Republic of the Congo (DRC). Box 4 highlights USAID-funded RAF programs and programs with RAF components. (See section D, page 21, for case studies of USAID-funded RAF programs).

B3b. USAID's DCA Partial Credit Guarantee Mechanism

USAID's DCA provides partial credit-risk guarantees to private-sector lenders to encourage them to provide credit to financially viable businesses and projects that contribute to development goals. There are four DCA guarantee structures, but DCA loan portfolio guarantees (LPGs) have been used most frequently for RAF activities. LPGs provide a guarantee of up to 50 percent to one or more lenders' portfolio of loans to borrowers in a predetermined sector, such as agribusiness. By limiting all guarantees to no more than 50 percent, the mechanism ensures that the financial institution retains at least an equal stake in the risk, which should encourage good investment assessments, decisions, monitoring, and collections efforts. LPGs are typically used to directly stimulate access to credit for underserved market segments, reduce onerous borrower collateral requirements, and stimulate competition among lenders. USAID's DCA partial credit guarantees have been used in innovative ways to help expand access to RAF throughout the world. Box 5 highlights the case of Uganda.

Box 4. Illustrative USAID RAF Activities

RAF Programs

- USAID's ARIES program
- Bolivia Rural Competitiveness Activity
- Croatia Agribusiness Competitiveness Enhancement Program
- Kosovo Cluster and Business Support Program
- Mali Finance Program
- Peru WOCCU's VCF Program

Programs with RAF Components

- YED in the DRC
- Accelerated Microfinance Advancement Program Knowledge Management

The DCA is an effective mechanism in countries with a developing private financial sector, fairly predictable fiscal and monetary policy, and a somewhat functional legal and regulatory system for the financial sector. In such countries, the mechanism can be used to encourage financial institutions that are reluctant to engage in RAF to take the risk. The DCA accelerates and encourages market response, because it lowers lending risk through USAID programs that address deficiencies in the business and lending climate. The hope is that after the initial demonstration that RAF is not as risky as the financial institution believed, they will then be willing to continue offering RAF to clients without the guarantee.

Box 5. DCA Overcomes Banks' RAF Aversion

The DCA has attracted seven banks to expand lending to unserved markets in Uganda, including rural and agriculture-related SMEs. USAID's Support for Private Enterprise Expansion and Development program designed a five-year DCA guarantee facility, under which 272 loans worth more than $24.2 million were made, 32 percent of which went to agriculture-related enterprises. By combining the DCA with technical assistance, banks moved away from relying solely on collateral-based lending toward cash flow analysis and other methods to determine creditworthiness. A study of DCA-supported businesses found that, on average, seasonal and full-time employment for men and women grew 78% percent and sales increased 61 percent. DCA coverage also facilitated larger loans, and most borrowers received a subsequent loan without guarantee coverage, a positive indication for sustainable access to credit (Averch & Harlow, 2007).

The DCA is more costly and generally less effective in extremely fragile or high-risk countries, such as those emerging from war or conflict, where the cost due to anticipated losses exceeds the value provided by the mechanism. In these cases, alternative approaches, such as the use of partial grants to financial institutions or directly to clients, might be considered. Whenever non-commercial approaches are used, however, it is important to constantly assess and then address the potential for negative consequences, such as the benefits going to the less needy. The DCA also does not work well in countries that offer high interest rates on treasury bills, which keep financial institutions from making loans.

Before a DCA starts, it should have a clear exit strategy that focuses on long-term, sustainable impact. The DCA guarantee should not serve as a simple substitute for collateral without any improvement in the underlying lending environment or borrower activities. Otherwise, lending will drop back to previous levels once the guarantee expires, with no sustainable improvement in access to finance.

C. Integrating RAF into Food Security Programs

RAF activities have generally been developed as one component in a broader agricultural and rural development program, and the same is likely to be true in the case of food security programs. Food security programs are similar to agricultural development programs because they focus on increasing agricultural productivity and the production of food and cash crops; improving food storage, processing, and transportation; and increasing the sale of agricultural products and household incomes. They are also similar to rural development programs because they recognize assisting rural households to generate additional income may require actions beyond agricultural sector development.

Because they recognize the immediacy of the need to address hunger and malnutrition, programs that focus on food security are likely to have a stronger sense of urgency than traditional rural and agricultural development programs. Food security programs’ target populations are also more likely to include the extremely poor and populations that are at risk of poor health and under-nutrition.

In cases of extreme urgency, such as in the aftermath of a natural disaster resulting in transitory food insecurity, RAF approaches might not be the best solution. In particular, RAF does not work well where markets are not functioning. For this reason, this primer focuses on how to address chronic food insecurity and assumes that markets are at least somewhat functional.

C1. Links between Food Security and RAF

RAF can be used as an enabler to help improve food access and availability; it can also be combined with complementary technical assistance and training to improve food utilization. Using RAF activities to help improve poor people’s incomes so they can afford to purchase adequate diets is often the most important contribution a RAF program can make, because poverty is often the underlying cause of food insecurity.

Because food security is more frequently hindered by a lack of purchasing power (i.e., the economic inability to access food) than food availability, RAF programs have to look beyond increasing the production of traditional crops and staple foods to higher-value food and non-food products. They must also use activities to increase the number of jobs and raise incomes for the poor. To maximize impact in terms of increased incomes, interventions must often address needs up and down the value chains, including working with larger producers and firms. Expanding the market potential of a large agro-processor, for example, will often result in increased demand for products from small farmers, transporters, and other small enterprises.

RAF activities can be used to help improve food utilization (e.g., by linking them with other ongoing community-based health and nutrition programs, or by adding technical assistance and training focused on improving food utilization behaviors). RAF activities can also be added to strengthen programs focused on improving access to and utilization of health and water and sanitation services, such as USAID's Title II food security development programs.

Box 6. Title II Development Programs in Bolivia

Title II programs illustrate the benefits of integrating RAF activities into programs that focus on food access and utilization. The Bolivia programs were located in the country's most food-insecure areas; they included agriculture, health and nutrition, and natural resource management components. The agricultural programs were market-driven, helping poor farm families increase their productivity and sell more products in higher-valued markets. As their farming operations became more sophisticated, these households needed credit to purchase inputs, (e.g., seeds and fertilizers) and equipment for improved processing and packing.

Another set of activities focused on key utilization objectives: increasing access to water and sanitation, and improving infant and young child feeding practices. Participating households' incomes increased dramatically and chronic child malnutrition in the areas served declined an average of 16 percent over the life of the project, or 3.8 percent per year. (van Haeften, Bentley, Fernandez, & McNulty, 2009)

C1a. Potential Contributions of Different RAF Approaches

RAF includes microfinance, SME finance, and VCF approaches that can directly or indirectly address chronic food insecurity. These topics are not covered extensively here, however, because FS Share has primers for SME finance and VCF approaches on its Web site (www.fsshare.org).

Microfinance. Microfinance can be an effective approach for addressing the broad range of RAF needs at the household level, including working capital, fixed-asset loans, micro-saving, remittances, and insurance. Microfinance is particularly useful in smoothing household food consumption, because it helps clients avoid the need to adopt dangerous coping strategies, such as borrowing from expensive moneylenders, selling productive assets, or harvesting crops prematurely. Because microfinance providers are generally committed to a social mission, they are likely to be more interested than banks and other commercial finance institutions in applying innovative approaches to serving the rural poor, especially with micro-loans and micro-savings. Because they work at the household level, microfinance initiatives can also be especially effective in capturing sample baseline data and demonstrating progress related to increasing income and assets. Some MFIs now use methodologies that include agricultural income (and non-agricultural income) in determining loan size; others disburse loans directly to input suppliers to ensure they are used to improve crop production.

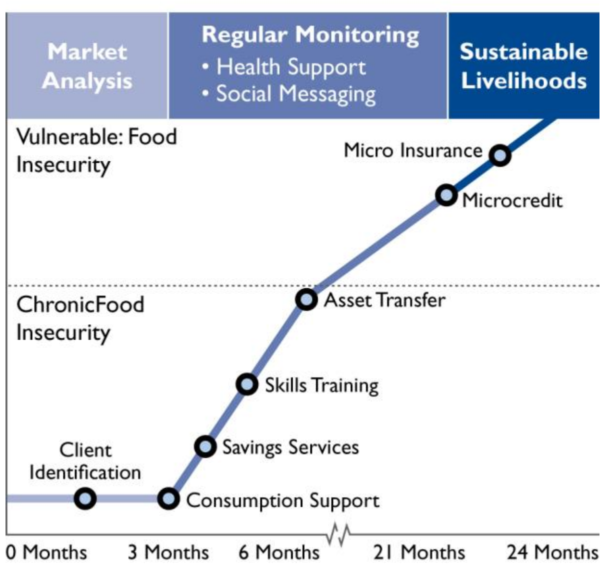
SME finance. The majority of SMEs, including agribusiness SMEs, are based in urban areas. Many have significant links to rural areas, however, so supporting their growth and access to finance is relevant to food security initiatives there. For example, many farmers and rural businesses are suppliers, wholesalers, and distributors for urban SMEs, and their growth depends on the growth of the SMEs that are more closely aligned with end-market opportunities. In addition, some of these SMEs are the lead firm within a competitive value chain and might be willing to guarantee or on-lend funds from financial institutions to rural and agribusinesses to the extent that it supports their business objectives. These types of initiatives generally require longer-term finance than microfinance initiatives; they may also require collateral, particularly where financial disclosure standards and contract enforcement are weak. Because SME loans are usually larger than microloans, statistical and "character" approaches to lending are less useful, requiring higher risk-management skills. The ability to legally register collateral and enforce contracts has a significant impact on risk management, and consequently on the risk premium (i.e., interest rate) banks require to lend to SMEs.

VCF. RAF is broader than VCF in that it does not necessarily focus on only specific value chains but often addresses the need to increase access more systemically. However, VCF approaches are still relevant, because the majority of financing in rural areas is provided by nonfinancial service providers (e.g., input suppliers and buyers within a value chain). Targeting growing rural and agricultural value chains can be an effective way to improve incomes and livelihoods for the rural poor. In addition, value chain actors can be the direct financiers of rural and agricultural enterprises when they see an opportunity to increase profits; they are often more willing than formal financial institutions to take financial risks, because they have intimate knowledge of the business and the firm's risk profile. VCF tends to work better with growing markets and high-value agricultural products than with traditional staples and other low-value products, however.

C1b. Constraints to Using RAF to Improve Food Security

Rural and agricultural credit may not always be the most appropriate approaches to deal with the food insecure, especially for the some of the poorest and most food-insecure households. As the Food Security Graduation Model (Figure 3) emphasizes, asset transfers (i.e., grants and food aid), village savings groups, and skills training are often needed before access to group or individual loans. Some of these constraints can be addressed in the design and implementation of an RAF program by incorporating asset transfers, for example, to assist the poorer and more food-insecure households to become creditworthy. While this model emphasizes lifting the extreme poor out of chronic food insecurity, the transitory food insecure often need similar — if not more of — this type of support. Achieving food security requires RAF to focus on the client and their particular needs, not simply on the financial institution or policy environment.

Figure 3. Food Security Graduation Model



Source: Adapted from CGAP, n.d.a.

C2. Designing and Implementing RAF Programs for Food Security

This primer assumes that an initial food security assessment has already been conducted and the target populations and program interventions have been tentatively identified. At a minimum, the program designer should have some sense of the nature, characteristics, and location of food insecurity in the country. To determine the role that finance might play in reducing food insecurity, it is important to understand the various risk-coping strategies that the food insecure use and how these strategies affect their vulnerability to food insecurity now and in the future. If that type of information did not surface in the initial food security assessment, then it can be captured in the RAF demand assessment. In such cases, the assessment should be designed by a cross-sectoral team representing RAF and food security expertise. By marrying the findings of the food security and RAF assessments, an effective approach can be designed, implemented, and evaluated, as described below.

Assessment. A thorough assessment of how RAF could be used to support a food security objective will be necessary. This assessment should consider the demand and supply of RAF. To identify gaps, the team should assess:

- *Demand*. The nature of clients' RAF needs and preferences, and the extent to which their access to RAF would improve food security (for them or others). Ideally, this information should be segregated and analyzed by geographic region, sector, poverty level, and gender. Some of this information can be extracted from market research conducted by current and potential RAF providers, but should be done prior to implementation.

- *Supply*. The main actors operating at the micro, meso, and macro levels, and the primary risks and constraints to RAF. Supply assessments should consider rural and agricultural VCF, as well as traditional retail finance providers.

- *Existing initiatives*. USAID's programs should build on activities by the host government and other donors rather than duplicate them. A mapping of the country's strategy and donor activity in RAF is essential to ensure USAID programs add value.

Design. Analysis of the information from the assessments will help design an efficient and effective RAF program to support food security. The specific design will depend largely on the nature of food insecurity and the degree of poverty facing the food insecure. RAF approaches are most appropriate for long-term endemic reasons for food insecurity (i.e., chronic food insecurity), such as poverty, not temporary causes of food insecurity (i.e., transitory food insecurity), such as natural disaster or civil strife. And as mentioned previously, extremely poor populations might require additional assistance, such as grants or skills training, to achieve a level of income at which they could benefit from RAF.

- *Consider the program's objectives and areas' level of development in program design*. Table 7 (next page) highlights how RAF activities can vary depending on a country's or area's level of development and specific food security objectives.

Table 7. Sample RAF Activities by Objective and Areas' Levels of Development

To Reduce Transitory Food Insecurity in Fragile Areas (High Poverty and Weak Institutions)	To Reduce Chronic Food Insecurity in Areas Beginning to Develop	To Reduce Chronic Food Insecurity in Developing Areas
Cash grants to rural poor; reinforcement of informal finance, such as rotating savings and credit associations, financial literacy training	Technical assistance to strengthen financial providers; possibly use DCA or other guarantee facility to stimulate RAF	Technical assistance to financial providers and support institutions, especially for new product and market development
Grants and technical assistance to financial providers and support institutions	Grants and technical assistance to strengthen support institutions	Technical assistance to financial providers and support institutions
Technical assistance to build basic legal and regulatory structures for enterprises, banking, and insurance	Technical assistance to improve legal and regulatory structures for banking and insurance; possibly specialized legislation for microfinance, leasing, etc.	Technical assistance to strengthen regulatory oversight for banking and insurance; possibly specialized legislation for microfinance, leasing, etc.
Preconditions: N/A	Preconditions: 1) sufficient economic activity to warrant financial services; 2) some economic stability; 3) reasonable safety/security	Preconditions: 1) functioning formal financial sector; 2) supportive enabling environment; 3) low inflation; 4) skilled and educated workforce; 5) increasing levels of trust within communities and in financial institutions.

- *Design for programmatic diversity to enhance results.* Where RAF is appropriate for the target food insecure population, the design will likely encompass RAF approaches to maximize holistic impact (e.g., VCF, working with insurance companies to develop agricultural insurance, and working with banks to expand rural savings by using innovative technologies). It is important to remember, however, that improving the supply of RAF does not always solve the problem. In some cases, clients' assets, market, and knowledge constraints can hinder the effective use of RAF. If programming resources are limited, the assessment should help prioritize and/or sequence interventions by demonstrating which approaches are most likely to result in more rapid expansion of RAF. For example, internal VCF is often used to demonstrate the ability to reduce risks associated with agricultural lending to financial institutions. Though food security issues are often urgent, RAF programs should, to the extent possible, emphasize ex-ante more than ex-post solutions to poverty and food insecurity. In other words, programs should emphasize preventive measures to keep food insecurity from worsening rather than just focus on measures to help those who are already food insecure. Therefore, programmers should consider interventions at the meso and macro levels in addition to the micro level (i.e., retail) to maximize long-term sustainable impact. Because it usually takes several years for legal and regulatory changes to take effect, such macro-level improvements should be planned to begin early in implementation .

- *Design in ways that reinforce, not distort, commercial markets*. Programmers should try to avoid damaging commercial markets. In some countries, however, the need or urgency might necessitate temporary incentives to jump-start RAF markets or attract commercial providers to the market. Smart subsidies, such as vouchers to purchase fertilizer, can "crowd in" demand and reinforce market efficiencies. Still, it is imperative to clearly distinguish asset-building grants from loans, which should be offered at market interest rates (Fripp, 2007). To avoid building long-term donor dependence, any use of grants or subsidies should be designed to be temporary and phased out as markets strengthen. Grant programs should be clearly separated from lending activities to avoid undermining credit discipline. For example, programs should not use financial institutions to distribute funds that do not have to be repaid.

- *Factor RAF's higher transaction costs and risks into design*. RAF faces risks and challenges beyond those typically found in financial markets. Table 8 summarizes important ones to consider in program design. For example, programmers can consider using innovative technologies (e.g., ATMs, smart cards, or mobile phone banking) to reduce transaction costs. Client-driven product development (including adaptation) and linking with dynamic value chains are common ways to address the risks associated with agricultural lending.

Table 8. Risks and Challenges in Developing RAF

In Financial Markets	In Rural Financial Markets	
	To Non-Farm Clients	To Farmers and Agriculture-Related Clients
• Unsound macroeconomic management (e.g., inflation) • Interest rate controls • Subsidized, directed credit • Ad-hoc debt forgiveness • Undeveloped legal systems for land rights, collateral claims, and contract enforcement • Low capacity of financial institutions, especially MFIs	Increased transaction costs due to • Low population density • Small transaction sizes • Limited non-farm economic activities • Inadequate infrastructure and social services	Increased risks due to • State-sponsored price controls, subsidies, and directed credit programs for agriculture • Seasonality, which causes high demand for credit and inability to repay until after harvest • Returns susceptible to affects from weather and pests • Variability in global agricultural export prices • Low agricultural productivity in many countries • Attempts to try new seeds, inputs, or technologies

Source. Adapted from A. Campion and S. Charitonenko, 2003, p.5.

Implementation. The more flexible the design, the easier it will be to implement the program and to adapt and adjust it to changes in the operating environment, political or macroeconomic changes, or natural disasters. Implementation should focus on the objectives to be achieved rather than being overly committed to the initial activities conceived in the design.

- *Allow for flexible adaptation to maximize results.* The extent to which the program focuses on end results (e.g., reductions in the number of food insecure), the easier it will be able to adapt its approach to changing circumstances. For example, if one pilot is more effective than the others, its successful approach should be emphasized. The ARIES program, for example, had to shift strategies from financing agricultural cooperatives to creating the Afghan Rural Finance Company to ensure more rapid results. Regardless, over-emphasizing specific results can yield unintended consequences: USAID's focus on expanding RAF in Afghanistan caused one partner MFI to grow too quickly without having adequate risk management controls in place, which led to high loan defaults and reduced impact (USAID, 2009a).

- *Ensure implementation team reflects cross-sectoral expertise.* The implementation team should include consultants with expertise in food security and RAF. This expertise should be transferred from international to local specialists over the life of the program to build local knowledge and sustainability. Freedom from Hunger, for example, offers cross-sectoral technical assistance on effective food utilization and income generation through its rural microfinance programs.

Monitoring and evaluation. Monitoring and evaluation should begin at the design phase by determining how impact will be measured, with specific targets against which results will be monitored over the life of the program.

- *Set baseline RAF and food-security indicators.* Indicators may include a mix of common RAF indicators (see Table 9) and food security-related indicators (e.g., increases in clients' household incomes, or changes in their asset base or dietary diversity scores). If not captured in the assessments, implementation should begin by collecting baseline data on the indicators that the program will use to measure progress.
- *Regular monitoring*. Monitoring should be conducted regularly throughout the life of the program, with feedback loops to key decision-makers so adjustments can be made to the design to enhance results. The database should be able to disaggregate data and monitor results by specific activities, implementers, type of financial institution, product, and client (e.g., farmers vs. other rural firms, women vs. men).
- *External evaluations*. External evaluations should also be used intermittently to identify potential problems or issues that implementers might be overlooking. Lessons can be extracted and shared to help improve the program in question and other programs.

Table 9. Sample RAF Indicators by Type of Intervention

Intervention Type	Sample Indicators
Micro level	Number of new RAF products or number of clients served
Meso level	Amount of US$ lent from wholesalers to support agricultural finance
Macro level	Legislation changed to remove interest rate caps

C3. Tools to Assist in the Development of RAF Interventions for Food Security

Along with this primer, programmers have access to tools to develop RAF interventions for food security:

- Annex C of this primer contains a diagnostic checklist to help determine the extent to which finance is a constraint to improving food security. Annex D has a model scope of work that can be used as a starting point for developing a request for proposals that uses RAF to strengthen food security in developing countries.

- USAID's FEWSNET (www.fews.net) Web site provides information on agricultural markets and livelihoods (USAID, n.d.b.).
- The International Finance Corporations'/World Bank's annual Doing Business Report (www.doingbusiness.org) offers free online information on countries' business laws and regulations (IFC, n.d.).
- The World Bank's Bank Regulation and Supervision Database (www.worldbank.org) provides information on how banks are regulated and supervised around the world (G. Caprio, R.E. Levine, and J.R. Barth, 2008).
- The International Development Law Organization's Microfinance Project (www.idlo.int) cites microfinance laws and regulations for multiple developing countries, and offers a platform for knowledge-sharing discussions (IDLO, n.d.).
- The Consultative Group to Assist the Poor (CGAP) Microfinance Gateway (www.microfinancegateway.org) provides online resources and information for the microfinance community (CGAP, n.d.b.) .
- For general business- and agribusiness-enabling environment issues, see the tools and knowledge provided by USAID's BizCLIR Project (www.bizclir.com) (USAID, n.d.c.).
- There are additional RAF materials and information in USAID's Microlinks Web site (www.microlinks.org) (USAID, n.d.g.).

D. Case Studies of RAF Activities That Can Support Food Security

The international development field still has a lot to learn about RAF and how best to leverage it to improve food security. Knowledge is particularly limited on how to mitigate the risks of agricultural finance, especially long-term investments, for which funding sources are scarce. There are RAF approaches that can improve food security, especially at the household level. The following case studies were selected because they illustrated the diverse types of RAF approaches that can be used to yield results related to improved food security. The cases come from Africa, Asia, and Latin America; they range from small, one-year pilots to large, long-term programs, and include successful and less successful examples of interventions. These cases have not been widely disseminated across USAID or its implementing partners.

Each case includes a synopsis of the country's background, environment, and RAF partners and approaches, including a description of the specific activities and tasks. Analysis of the results includes key findings and lessons learned, and a discussion of the intervention's elements or approach that can be considered prerequisites for program replication. Exhibit A (next page) summarizes the cases. The first three address chronic food insecurity and the last deals with transitory food insecurity.

D1. Case 1: Linking with MFIs to Improve Food Access and Utilization[3]

Since 1989, Freedom from Hunger (FFH) has used microfinance as a platform to deliver non-financial services (e.g., dialogue-based education services) that have a direct impact on chronic

[3] This case is adapted from Loupeda & Gray (2006). *Integrating Microfinance and Education for Improved Food Security*. FFH.

Exhibit A. RAF Cases

Program	Description
FFH links with MFIs to improve food access and utilization	Using microfinance as a platform for delivering health and nutrition education, Freedom from Hunger has been able to reduce chronic food insecurity in Africa and Latin America. Its cross-sectoral programs holistically address the impediments to effective food utilization through educational services and use rural savings and credit to improve incomes.
USAID/Afghanistan's Comprehensive RAF Strengthening improves food availability and access	Working around regulatory constraints, the project developed a rural financial system by working with MFIs, credit unions, banks, a wholesale financial institution, and a new agricultural finance company (that used a value chain approach) to expand financial access (i.e., credit and savings) to micro, small, and medium enterprises in rural areas of Afghanistan.
USAID's Youth Enterprise Development Pilot increases incomes and food access in the DRC	This pilot focused on enterprise development training and access to finance (savings emphasis) for 100 youth (60 females), resulting in increased income and spending on food and health services, as well as improved health choices, possibly reducing risky behaviors related to HIV and AIDS contraction.
Dowa Emergency Cash Transfers replaces food aid during transitory food crisis in Malawi	The program used innovative technologies and methodologies to provide cash payments (as an alternative to providing food aid) to relieve households that had lost income due to a severe localized crop failure in central Malawi.

food insecurity. Their main approach involved creating buy-in within local MFIs to take a more cross-sectoral approach to microfinance by integrating credit, savings, and awareness in a way that resulted in improved food security. Specifically, FFH has been promoting and disseminating two methodologies that combine group-based microfinance and dialogue-based education for participants: Credit with Education and Saving for Change. Credit with Education combines financial services using the village banking methodology with education sessions on topics pertaining to health and food security. A partnership with Oxfam America, Saving for Change is an integrated service methodology that uses savings-led microfinance.

D1a. Objectives

The goal of Credit with Education and Saving for Change is to leverage microfinance and education to achieve a greater impact on the lives of the clients. The programs take advantage of the group's meetings for group-lending transactions and savings collection to provide simple, key education messages to participants.

D1b. Approach

FFH has developed a set of systematic technical assistance activities, including workshops and formal training sessions, to equip its partners with the skills necessary to integrate microfinance with non-financial services. Because of its cross-sectoral technical assistance, partner organizations can launch, manage, and expand the integrated service. FFH applies two strategies for its technical assistance provision, depending on whether the partner organization is already providing financial services:

- *Adopting the full integrated services methodology* (Credit with Education or Saving for Change). FFH offers key support in launch of group-based financial services; training of trainers in the education modules; and developing systems for monitoring and supervision, internal controls system, and incentivizing field agents.

- *Adding education services to existing group-based financial services* (especially microfinance institutions). FFH offers key support in combining existing financial services with new education services; training of trainers in the education modules; and a simple monitoring and supervision system design.

D1c. Results

FFH has conducted multiple qualitative and quantitative evaluations to test its "benefits model," depicted in Figure 4 (next page). The integration of education into group microfinance services works to address food insecurity and poverty because:

1. Access to financial services (i.e., loans and savings) offers poor households a flexible and potentially sustainable means for enhancing their livelihood strategies and reducing their vulnerability.
2. Increased incomes earned in steady and regular amounts by the poorest households, which are usually headed by women, have the most direct, positive impact on food security and nutrition.
3. Improved knowledge, attitudes, and behaviors regarding maternal and child health and nutrition had a positive impact on the nutrition of women and young children.

Table 10 shows that food insecurity levels of for microfinance clients who received credit with education decreased over a period of one to three years.

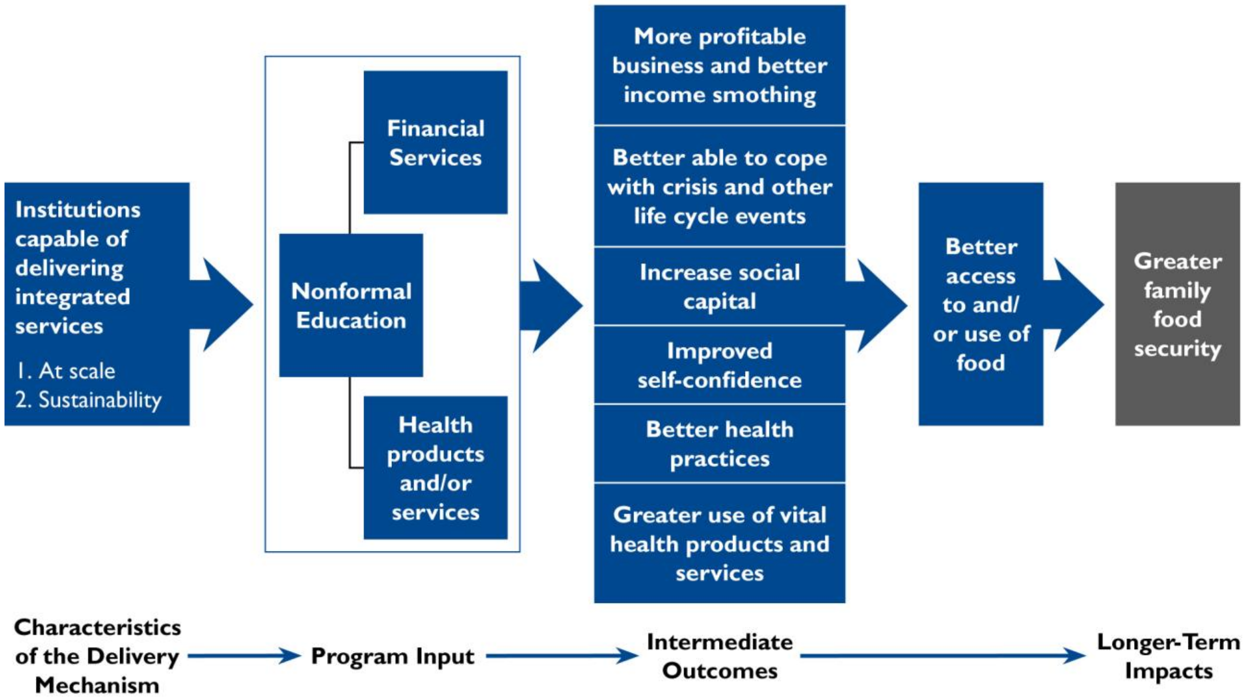
D1d. Key Findings and Lessons Learned

FFH found that income alone is unlikely to have a substantial impact on the nutrition of women and young children, unless key practices affecting maternal and child health and nutrition are also adopted. To propagate such practices, FFH carefully selects its microfinance partners and provides awareness training through participatory, dialogue-based educational services in the

Table 10. Food Insecurity Levels for *Credit with Education* Clients

Percentage of Clients Who Are Food-Insecure per Organization (Country, Year Data Collected)	Incoming Clients	Clients in the Program 1-3 Years
CRECER (Bolivia, 2006)	60%	n/a
ESPOIR (Ecuador, 2006)	47%	33%
RCPB (Burkina Faso, 2003)	84%	73%
Brawka Breman, and Afram (Ghana, 2006)	48%	36%
Finca Peru (Peru, 2007)	53%	n/a
Prisma (Peru, 2008)	82%	n/a
PADME (Benin, 2007)	60%	n/a
Bandhan (India, 2008)	n/a	49%
Kondo Jigima (Mali, 2009)	86%	n/a

Figure 4. Freedom from Hunger Benefits Model



Source: Loupeda and Gray, 2009

areas of diarrheal disease management and prevention; breastfeeding; infant and child feeding; birth timing and spacing; malaria; women's health; managing childhood illnesses; financial planning for illnesses; and healthy habits, such as how to reduce the chance of contracting HIV and AIDS.

FFH also found that group members can provide mutual support for overcoming obstacles to change, such as lack of necessary inputs, pressure of daily routine, and norms of family and community.

D1e. Prerequisites for Replication

FFH works with MFIs to provide educational services that enhance food security. To replicate its programs, FFH looks for MFIs that are willing to take a cross-sectoral approach to delivering their financial services for increased food security. These MFIs are usually capable of delivering integrated services (e.g., non-formal education and health services) with their financial services; they have usually reached scale, are sustainable, and offer deposit-taking services. It is important for partner MFIs to be financially self-sustainable so they can generate enough income to sustain the operations and educational efforts by the same local staff (usually female group organizers or loan officers). Because financially self-sufficient MFIs are able to cover the costs of the microfinance operations, the marginal cost of adding an education program is small, assuming that an appropriate set of messages and communication strategies already exist.

D2. Case 2: Comprehensive RAF Strengthening in Afghanistan[4]

USAID's ARIES program, started in 2006, aimed to create a strong private-sector foundation for a sustainable, market-driven rural and agricultural MSME financial system in Afghanistan. A three-year, $100-million program managed by the Academy for Educational Development, ARIES built on the success of other USAID-funded programs. For example, the Rebuilding Agricultural Markets Program provided technical assistance and financing to many agricultural projects, including grapes and raisin processing.

D2a. Objectives

The goal of the ARIES program was to expand sustainable access to financial services for MSMEs as a means of creating jobs and increasing incomes for rural Afghans, which would also improve food security by increasing food availability and access.

D2b. Approach

When ARIES started, there were few formal financial services being provided in rural Afghanistan. It had been only a few years since the country had been freed from Taliban rule, and the financial system was just beginning to develop. USAID and other multilaterals' were working with the Ministry of Finance and other ministries to set up the Central Bank and create laws for the financial sector (see Box 7). Because the regulatory framework was still weak at the outset of the project, ARIES decided to focus on financial services that did not require a strong regulatory framework, such as microfinance and non-bank SME finance that could serve Afghanistan's rural population. By working on initiatives at the micro and meso levels, ARIES supported and strengthened these institutions:

> **Box 7. Banking Reforms in Afghanistan**
>
> USAID's Afghanistan Economic Governance Program, which focused on building regulatory capacity for the financial system, was slow to create results because the government's absorptive capacity was limited. With time, however, the bank licensing process and laws were developed, and 17 private banks were established. (USAID 2009b; USAID 2010)

- FINCA Afghanistan offers low-tier individual and group microfinance (with loans from less than $200 to $2,000) through its village banking network. Sixty percent of its clients are women. FINCA Afghanistan ensured local buy-in by developing *Shariah*-compliant products (i.e., in accord with Islamic laws and teachings of the *Qur'an*)[5]. As of August 2009, FINCA Afghanistan had cumulatively disbursed more than 90,000 loans worth $27.8 million in its ARIES-supported branches.
- The World Council of Credit Unions, through its credit union model customized to the Afghan context, offers *Shariah*-compliant individual and group microfinance loans and savings accounts from less than $200 to $5,000. While the organization has made an important contribution to developing savings outlets, even in the conflict-ridden South, its attempt to develop a sustainable savings-driven financial cooperative system has been hindered by Afghan's low incomes and limited savings.

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[4] Extracted from USAID (2009). *Designing a Financial System from the Ground Up*. ARIES Project and USAID (2010). *Program spotlight: A local Solution for stimulating SME financing in Afghanistan*. ARIES Project Brief.

[5] Primarily, murabaha products, essentially "deferred sale financing," in which the client puts down a down payment on a purchase and the intermediary (i.e., financier) makes the purchase for the client, which the client agrees to buy at a higher amount at a pre-agreed upon later date or in several installments.

- At the meso-level, ARIES supported Microfinance Investment Support Facility for Afghanistan, a wholesale lending institution that supports 14 partner MFIs that offer individual and group loans ranging from $200 to $1,000. With technical assistance from ShoreBank International, the program also supports four SME finance partner institutions that make loans of $1,000 to $100,000.
- ARIES worked with ACDI/VOCA's implementing partner, the Afghan Rural Finance Company (ARFC), an independent finance company that uses a value chain approach to serve the upper range of SME finance, from $20,000 to more than $1 million, with conventional and *Shariah*-compliant options.

ARIES' objective in supporting ACDI/VOCA's establishment of ARFC in 2007 was to advance upper-tier SME investment in USAID's target areas to create a significant number of sustainable jobs, linked to growing value chains. The initial strategy to create agricultural cooperatives was quickly determined to be impractical within the project's three-year timeline. ARIES shifted strategy to target direct investment in existing private sector agriculture-related firms. This allowed an almost immediate commencement of activities and investments, as the local conflict context called for rapid interventions.

ARFC leveraged its resources by working strategically with other USAID rural enterprise programs, particularly the Alternative Development Program – East and the Afghanistan Small and Medium Enterprise Development program. Jointly, they identified and supported qualified SMEs that required grant funding and technical assistance (offered by these "sister programs"), which also helped underwrite the business and credit risk to make the loans "investment-ready." Following this methodology, ARFC focused on financing high-value processing and value-added lead value chain operators, rather than investing in farm production, due to their higher revenues, lower risks, and greater potential to create jobs in the rural areas. For example, the ARFC's largest commitment, a $4.3-million loan to the Omid Bahar Pomegranate Juice Processing Factory in Kabul, is expected to create and/or support over 10,000 full-time, part-time, and seasonal jobs, including suppliers. Another example is highlighted in Box 8.

Box 8. Investing in Livestock Fodder Improves Income and Food Security

In the arid southeast region of Afghanistan, a lack of fodder for sheep, goats and cattle has become a serious food security and livelihood concern for a population that relies on livestock for food and income. Farmers find it difficult to obtain credit to buy fertilizers, improved seeds and other inputs to increase fodder production. The solution was a seed voucher program, jointly developed by a USAID rural agricultural project and ARFC. ARFC developed a short-term funding product for existing farm stores in the region to purchase an improved alfalfa seed. ARFC extended input supply loans of $36,000 each to 12 farm stores to purchase the perennial seed. In collaboration with local partners, the seed packages were distributed to over 12,000 farmers. Farmers and the farm stores receive training to improve planting, harvesting and packaging. The farmers have each planted about 1/3 acre of alfalfa, which is expected to yield up to 36,000 tons annually. ARFC structured the 90-day loans as a simple and verifiable credit mechanism to jump-start seed distribution in rural Afghanistan.

D2c.ARFC Results

As of September 2009, ARFC had 66 active clients and had disbursed 84 loans worth $19.2 million, almost doubling its original target of $10.4 million. At that time, the ARFC portfolio had an outstanding balance of more than $13.9 million, and its portfolio at risk was 5.2 percent, with only one write-off to date. ARFC was nearing operational self-sufficient, with revenues covering

97 percent of its operational expenses. ARFC had contributed to food security for Afghan households by supporting or creating more than 38,869 jobs.

D2d. Key Findings and Lessons Learned

ARIES faced many challenges, including the need to adapt financial products to comply with local culture and *Shariah* law. ARIES learned that though it is ideal for local development to be driven by local professionals, in countries that have suffered educational setbacks as a result of long conflicts, it can take significant time and investment to build sufficient local capacity to manage and lead formal financial institutions. Development professionals must be patient and willing to make substantial investments to develop local capacity through training, retraining, mentoring, and one-on-one technical assistance.

Maintaining portfolio quality amid calls for rapid expansion and increasingly restrictive security concerns was also a challenge. Programs must be careful to ensure that the proper incentives and internal controls are in place to balance rapid RAF expansion with portfolio quality. If too much emphasis is placed on growth, portfolio quality will suffer, which can poison the entire financial sector as word gets out that loan repayment is not expected.

ARIES found that banks are reluctant to finance farmers and SMEs because they tend to be more conservative than MFIs or lead firms operating within growing value chains. They are also more likely to be followers than leaders in exploring new markets, especially when they do not have the expertise to assess the risks.

ARFC faced significant hurdles, particularly as a result of Afghan’s limited private investment capital, and ongoing security concerns, which limited its ability to improve food availability and access. The following points illustrate other challenges, how the project adjusted, and the lessons learned for others working in similar contexts.

Challenge: The original concept of working with agricultural cooperatives to create jobs in the ARIES target regions was not realistic in terms of the project timeframe, human capacity, or the state of the conflict when the project began. As a result, ARIES revised the strategy to establish ARFC as a direct SME lender, which allowed for more rapid start-up.

Lessons learned: Balancing expediency with effectiveness to achieve development outcomes is a constant struggle in conflict environments. In this instance, it was more politically imperative to rapidly create jobs as an alternative to poppy farming and to reduce incentives to band with the counter-insurgents than it was to develop an Afghan-led initiative.

Challenge: SMEs engaged in rural and agricultural production in Afghanistan are high-risk clients because they are seasonal, subject to uncertain markets and vulnerable to drought, and other environmental disasters. Furthermore, electricity, roads, and the other infrastructure are inadequate and unreliable. So, ARFC adjusted its focus to off-farm rural and agriculture-related SMEs to include processing, manufacturing and distribution sectors with high potential for creating and supporting jobs in rural areas. This allowed ARFC to meet its institutional sustainability targets.

Lessons learned: Opportunities for rapid sustainable job creation in conflict environments are limited, requiring program flexibility to achieve results. VCF of urban and peri-urban firms can have positive multiplier effects that flow-down to the rural sector.

D2e. Pre-requisites for Replication

ARIES was designed to work in an environment where there is a nascent financial sector. On the regulatory and legal side, however, a functioning central bank and basic banking laws needed to be in place for RAF to proliferate beyond the level of nonprofit MFIs. The project was also very capital-intensive; it included technical support, security costs, and funds for on-lending and the prolonged requirement to recruit and train local staff in a country that had almost no commercial and agricultural lending expertise.

D3. Case 3: Youth Enterprise Development Pilot Increases Food Access in the Democratic Republic of Congo[6]

Funded by USAID/Washington's Cross-Sectoral Youth program, the Educational Development Center's project was a one-year pilot with 100 youth (ages 13 to 29) in the DRC. Implemented through a partnership with Family Health International and technical assistance from AZMJ, the project trained youth on enterprise development to increase their financial self-sufficiency and test whether an increase in income would correlate with a decrease in risky behavior and incidence of HIV and AIDS contraction.

The project took place in Bukavu, the capital of South Kivu Province that is home to an estimated 800,000 people, the majority of whom are young. Though food production in the region is relatively strong, poverty is prevalent because most youth either have no income or rely on less than $0.50 (50 cents) a day (Beauvy, Duggleby, and Degnan, 2008). The project design assessment found a relationship between economic empowerment and women's ability to negotiate safe sex. Young women noted they often engaged in prostitution or "transactional sex" to meet their basic needs and run their business, increasing their risk of HIV and AIDS infection.

Though it would take more time to show causal linkages, in less than one year, the pilot demonstrated increased income and increased spending on food and health among the poorest. In the initial survey, only 20 percent of the youth agreed that their family had enough money to get by. By project-end, this increased to 61 percent. Because many youth are the primary breadwinners for their families, increases in youth income indicated improvements in food security for many families. The pilot showed that small investments in youth enterprises can lead to large income gains and increased spending on food and health among the poorest.

D3a. Objectives

The objective of the DRC YED pilot was to test the cross-sectoral impact of an increase in youth's entrepreneurial income on health and risky behavior.

Within the business and entrepreneurship aspect of the project, the YED program was designed

[6] Extracted from Campion and Ekka (2009). *Assessing Youth Entrepreneurship Skills: Final Findings.* Cross-Sectoral Youth program, USAID. Note that this project worked with primarily urban youth and the impact evaluations did not include a control group to demonstrate causal linkages to program results.

to accomplish three main objectives:

1. increase youth business management skills
2. increase youth business confidence
3. increase youth financial self-sufficiency

The project also tracked changes in health-related choices (linked to behaviors), and food and health expenses of youth, which are related to food access and utilization.

D3b. Approach

The first YED training included 100 youth and focused on understanding what it takes to be a successful entrepreneur. The second training taught 60 of the 100 participants how to conduct market research and develop a business plan. The program encouraged youth to consider higher-value productive activities, such as raising poultry and horticulture, rather than more common, simple trade-based activities. Based on a competitive process and a review of business plans submitted, 20 out of 60 youth were selected to receive the third training on accounting and inventory management. Some of the promising practices related to program design included:

Asset-building grants reinforced savings. YED gave $300 grants to the 20 top youth (based on a competitive business plan development process) and $40 grants to the remaining 80 youth. To encourage the youth to open savings accounts, the grants were deposited directly into savings accounts with local credit unions. (Participants chose the credit union they wanted to use.) The benefits of saving and the link to accessing credit were reinforced through the training program and weekly business club meetings.

Emphasis on female youth. Every stage of the program was designed to include more females than males (60 females to 40 males). This helped address the specific needs of female youth and avoided domination by young males, a common occurrence in mixed-gender programs.

Leveraged resources. By working out of Family Health International's regional project office, the YED program was inexpensive, requiring minimal funds to cover direct local program costs.

D3c. Results

Many results of the YED program indicated improved access to food and health services for participants and their families. These included:

An increase in youth's income. The YED program helped increase the participants' mean monthly revenues by 40 percent, from $114.60 to $161.40. Youth with the least education benefitted the most: Their monthly revenue more than doubled, from $53 in the initial survey to $111 in the final survey.
An increase in food expenses for the poorest and least educated youth. Youth with only primary school education, who had the lowest incomes on average, increased spending on food by 83 percent, from $21 in the first survey to $39 in the final survey.

An increase in financial self-sufficiency. The average savings per month for each household increased 72 percent, from $10.80 to $18.60, from the first to the second survey. In the first survey, only 20 percent (18 of 90 respondents) agreed that their family had enough money to get by. In the second survey, 61 percent (51 of 84 respondents) said their family had enough money to get by.

A positive impact on youth's health choices. The percentage of youth who said that they would risk their health to expand their business declined from 11 percent in the first survey to just 1 percent in the final survey. In addition, youth's average monthly household spending on health increased by 21 percent, from $3.20 in the initial survey to $3.90 in the final survey.

D3d. Key Findings and Lessons Learned

Focus on female youth to reduce gender income gap. The average monthly income disparity between males and females dropped from $40 per month in the first survey to $8 per month in the second survey.

Strengthen youth business to increase employment. As participants' income rose, so did their ability to employ more people. Older and more educated participants, especially the ones who received the $300 grant, were able to hire more employees.

Poorest and least educated benefited the most. Findings showed that though youth revenues increased across groups with different poverty and education levels, the percentage increase was greater among youth with lower incomes and education levels (i.e., primary education) than those with higher incomes and education levels (i.e., secondary or college).

D3e. Prerequisites for Replication

This program is easily replicable because it requires few resources. It used primarily local consultants, had a small budget, and was an add-on to an existing USAID program. This type of program works best in a place that has a dynamic economy with entrepreneurial youth engaging in productive activities in the informal sector. This was a pilot program; it was not set up to be a permanent institution. Additional donor funding would be necessary to expand the impact beyond the initial youth.

To facilitate implementation, programs can seek to link with organizations catering to youth. These organizations can provide coordination and training assistance. Youth can also benefit from an organization's other programs, such as training on health, nutrition, and how to reduce risks associated with HIV and AIDS.

To identify a financial institution suitable for partnering, programs should consider youth-friendly institutions with lower barriers to first-time savings and lending (e.g., credit unions or MFIs). These institutions are often willing to explain their products and requirements for demonstrating creditworthiness. If there are not appropriate financial institutions, the youth can start a rotating savings and credit association to reinforce a good savings and credit culture.

D4. Case 4: Dowa Emergency Cash Transfers Replace Food Aid during Transitory Food Crisis in Malawi[7]

In response to a food and livelihoods crisis in Central Malawi, with funding from the U.K.'s Department for International Development, Concern Worldwide implemented the Dowa Emergency Cash Transfers (DECT) project. DECT provided cash payments (as an alternative to providing food aid) through innovative technologies and methodologies to relieve households that had suffered from loss of income due to a severe localized harvest failure. The Famine Early Warning System Network estimated that farming households lost 40 to 100 percent of their crops, and warned that some areas would require emergency assistance. Cash payments, distributed through smart cards, varied according to household size and were indexed to the price of maize to account for price fluctuations. Cash transfers helped DECT participants invest in agriculture and livestock, spend more time working in their fields, and afford essential health care. At the market level, the participants' purchasing power stimulated local markets and trade, and had a beneficial effect on rural labor markets.

The DECT project demonstrates the potential role of rural financial providers and the use of technology to facilitate cash transfers in emergency food security contexts, specifically, the use of smart cards, biometric recognition, mobile banking, and alternative access points for rural financial institutions to reach food-insecure communities.

D4a. Objectives

The DECT project had three objectives:

1. Enable more than 10,000 households in the Dowa District to obtain their missing food entitlement for five months (December 2006 through April 2007) by providing direct cash transfers.
2. Develop and refine methods for the delivery of cash transfers in emergency food security contexts, including mobile banking and the use of technology (e.g., smart cards and biometric recognition) for beneficiary registration and verification, and draw lessons regarding these methods for longer-term social protection programming.
3. Explore market responses to cash transfers in rural areas and draw lessons for potential market enhancement programs and longer-term social protection programming.

D4b. Approach

DECT used cash transfers to reach 10,000 Malawian households to cover their food entitlements for the 2006/2007 hungry season. The program used smart cards activated by fingerprints to disburse payments once a month for the five-month intervention. The program mapped pay-points throughout the project area using criteria of convergence and convenience. On a pay day, people assembled at the pay-point and money was disbursed from a four-wheel-drive vehicle that served as a mobile bank.

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[7] Extracted from Davies, Simon. (n.d.) *Making the Most of It: A Regional Multiplier Approach to Estimating the Impact of Cash Transfers on the Market. Concern Worldwide* (Malawi).

The cash transfers were adjusted to household size (small, medium, and large); larger households received larger transfers. The transfers were index-linked and adjusted to food prices in local markets. Linking cash transfers to local food price indexes ensured that DECT participants had enough money to meet their missing food entitlements every month, regardless of fluctuations in food prices. The project disbursed only cash, unlike other projects that offered cash and food aid. The program found that people preferred cash transfers to food aid when local food markets were working, because cash allowed participants to meet their food and non-food needs.

The program targeted women as primary beneficiaries, based on the assumption that women generally use cash transfers for feeding children and caring for the family, not for their personal needs and wants (as more men do). At pay-points on pay days, participants spent most of the time sitting and waiting for their turn to collect their cash. This provided an opportunity to raise awareness on issues in the community, mostly related to financial management and health care. DECT hired local musicians to compose songs and a drama group to devise plays that communicated educational messages on topics ranging from safekeeping of smart cards and how to use DECT cash to increase participants' knowledge about HIV and AIDS, nutrition, family planning, and winter crop preparation.

D4c. Results

A survey at the end of the project showed DECT had several positive results:

- Provided food security for more than 10,000 Malawian households, covering their missing food entitlements during the 2006/0707 hungry season. Food consumption rose across all age-sex cohorts, with an immediate increase in meals per day across all households by as much as 40 percent for adults in female-headed households. Over DECT's five-month period, 64 percent of cash transfers were spent on food and 36 percent were spent on non-food items, such as health care and education.
- Smoothed household food consumption, avoiding the need to adopt dangerous coping strategies such as incurring debt, selling productive assets, or harvesting crops prematurely.
- Boosted purchasing power of beneficiaries, which also had marketplace impacts in terms of increasing sales volumes by traders, opening new markets, and creating jobs.
- Contributed to household time and labor savings, especially for females, who had money to buy maize and pay for its milling. Women indicated that when they received maize as food aid, they spent much of their time pounding it to produce flour.

D4d. Key Findings and Lessons Learned

The DECT project concluded with three core lessons learned:

1. For emergencies and social protection programming, a "social minimum" standard of living should be calculated to ensure a constant entitlement to basic food and non-food items. Cash transfers should be used to protect the poor from dropping below that minimum.

2. DECT missed an opportunity to sensitize smart card holders to possibilities of accessing savings and other banking services after the project ended in April 2007.
3. To improve the efficiency and use of smart cards (at $5 each), mobile banking, and technology (e.g., the biometric database of participants), it would be beneficial to link them with other social transfers, such as fertilizer subsidies, and education and health waivers. Links with private-sector uses, such as savings and loan payments, would also be beneficial.

D4e. Prerequisites for Replication

The DECT project was designed in response to a transitory food crisis that resulted from a localized harvest failure. The project was effective in Malawi because food markets were functioning, but would probably not work in an emergency situation in which the lack of food is more widespread or where markets are not generally working. In such cases, direct food aid would be more appropriate.

E. Lessons Learned from RAF programs

In most countries, food insecurity is best addressed by increasing the incomes and purchasing power of the poor, not increasing food production. RAF, as an enabler of increased production, jobs, and incomes, has an important role to play in this process. Some income increases will come from better farm productivity and a switch to the production and sale of higher-valued products. Other increases will result from the expansion of rural and agriculture-based enterprises. Enabling smallholders to access higher-valued markets is often one of the best ways to motivate them to make use of credit and adopt new technologies and practices. In addition, encouraging savings mobilization as a way to reduce vulnerability and build assets is often a more appropriate starting point for the food insecure than facilitating access to credit. Program designers also need to consider the job and income needs of landless rural and urban poor, not only low-income farmers. This argues for strategies that address needs up and down agricultural value chains. Such strategies will likely require working with larger farms and firms in addition to the rural poor.

The research and cases reviewed for this primer point to a number of other lessons for programs using RAF to reduce food insecurity and poverty:

Avoid past mistakes by emphasizing market-driven principles and working with commercial providers of RAF. In other words, do not damage markets by subsidizing interest rates or directing finance to specific populations or crops. As seen in the ARIES program, formal financial institutions are reluctant to offer RAF, whereas MFIs and value chain actors are more inclined. Convincing formal financial institutions that RAF can be done successfully often requires technical assistance, training on mitigating risks, and demonstrating profit potential.

Forge host-country counterpart buy-in and develop local capacity to bring results to scale. USAID programs are often good at demonstrating short-term results. But for significant and sustainable longer-term results, host-country counterparts, including financial institutions and government agencies, must embrace the approach and methodologies and take them on as their own for results to continue and expand after program-funding ends. As seen in ARIES, forging host-country counterpart buy-in by adapting to the local needs — in this case, *Shariah*-compliant products — helps generate further demand. Furthermore, as FFH demonstrated, commitment to building local capacity (including MFIs and their staff) helps reduce costs and maximize results (e.g., increased incomes and savings, and improved food access and utilization).

Address meso- and macro-level constraints as early as possible. As illustrated by the case in Afghanistan, though legal and regulatory constraints often take a long time to address, they can have significant impacts on the market. Project teams can help by including a mechanism to bring information about legal and regulatory constraints important at the field level to those responsible for the reform agenda.

Consider VCF approaches to address food insecurity. Lack of access to profitable markets is often the greatest constraint to the poor's ability to access RAF and increase their incomes. Direct finance within value chains demonstrates how important it is to understand the risks and opportunities within agricultural markets. These demonstrations can then be used to attract financial institutions to rural and agricultural finance, showing them how knowledge of agricultural markets can overcome constraints and mitigate risk.

Consider supporting large farmers, SMEs, and high-value products to holistically improve food security. To improve food security, donors tend to focus too much on small famers and traditional staples; they are often averse to working with and supporting larger farmers and agriculture-related firms. Increasing access to RAF at all levels of growth-oriented value chains, however, can play an important role in increasing income, financial access, and food security for smallholders and the rural poor.

Specialized efforts are often needed to serve poorer households, rural women, and youth. By emphasizing outreach to young females in the DRC, the YED project ensured that management was aware of and could address their specific needs, such as additional assistance to understand management principles.

Integrate cost-effective uses of technology to expand outreach to rural areas. As the DECT case demonstrates, new technologies can reduce transactions costs. Smart cards, ATMs, personal digital assistants (for loan analysis), and cell phone banking are good examples, though they usually require significant up-front investment in infrastructure and the legal and regulatory environment. However, technological infrastructure can be leveraged to extend multiple RAF and other services to rural areas.

Apply holistic and cross-sectoral approaches to maximize value. As the FFH and YED cases illustrate, holistic approaches to addressing the finance, technical assistance, and knowledge needs of the food insecure are more likely than finance-only interventions to have a broad and sustainable impact, especially in improving food utilization. Furthermore, including local and international agricultural development, economic growth, and food security experts on assessment, design, and implementation teams ensures that multiple perspectives are considered.

Develop a strategy at the beginning of emergency relief programs to transition to development approaches to avoid inhibiting commercial market development later. While temporary subsidies or other incentives might be justified in the short term, it is important to proactively consider when and how to transition from them. The design team should carefully align incentives to avoid market distortions or disincentives for commercial finance to enter once markets are functional. The DECT program, for example, could have reinforced financial markets by tying its cash transfers to savings accounts at existing financial institutions.

F. Concluding Remarks

When deciding which RAF approaches to use to improve food security, one must first assess the nature of food insecurity and the extent to which a lack of access to rural and agricultural finance is hindering food access, availability, and utilization. In the future, RAF programs should focus primarily on developing market-driven solutions. In some food-insecure areas, especially where markets are not functioning, the need or urgency might be such that temporary incentives are justified to jump-start RAF markets or to entice commercial providers to offer RAF.

ANNEX A. GLOSSARY

Unless otherwise noted, all definitions were taken from *Glossary of Terms for Agricultural Insurance and Rural Finance* (1992) FAO Agricultural Services Bulletin 100.

Agribusiness. A combination of the terms agriculture and business signifying a broad definition of agriculture that includes the supply of inputs, farming, harvesting, distribution, shipping, storage, processing, advertising, and selling of agricultural products.

Agricultural cooperative. A group of farmers who pool resources for certain activities, such as to acquire volume discounts on inputs or to access credit.

Agriculture-related enterprise. Any business, organization, firm, or company of variable size whose development is based on an agriculture-related economic activity. These enterprises can be located anywhere along the value chain, from inputs to production to processing to marketing to trade.

Agricultural finance. A field of work in which people aim to improve access to efficient, sustainable financial services for the agriculture industry, including farmers and all related enterprises.

Business enabling environment. Norms, customs, laws, regulations, policies, international trade agreements, and public infrastructure that facilitate or hinder the movement of a product or service along its value chain (”Business enabling environment”, 2009).

Capital. A measure of the accumulated financial strength of an individual, firm, or nation, created by sacrificing present consumption in favor of investment that will generate future returns above investment costs (”Capital”, 2009).

Collateral. Any items pledged to secure a loan, traditionally in the form of fixed assets, particularly land. Alternatives forms of collateral include group guarantees, compulsory savings, nominal assets, and personal guarantees. See movable and immovable collateral.

Contract farming. A farmer promises/contracts with a buyer to raise a crop that the buyer will purchase at harvest at either market price or a previously agreed upon price.

Correlated risk. Potential for negative impacts on a group of people in a region or regions at the same time and to a similar extent (i.e., commodity price risk) (Skees & H.B. Price, 2006).

Credit bureau. A public or private registry that collects information about the payment habits and current debt of individuals and companies (Skees & H.B. Price, 2006).

Credit guarantee. Involves three parties — guarantor, lender and borrower — bound by a contract. Typically, a guarantor contractually agrees with a lender to accept the responsibility, usually partial, for a borrower’s obligation to the lender if the borrower is unable to meet the obligation (Skees & H.B. Price, 2006).

Credit union. A member-owned financial institution that has no external shareholders, with each member having the right to one vote in the organization. Members may deposit money with the organization and borrow from it (Skees & H.B. Price, 2006).

Debt. An obligation to pay money, deliver goods, or render services under an express or implied agreement. One who owes is a debtor or debitor; one to whom debt is owed is a debtee, creditor, or lender. Use of debt in a firm’s financial structure creates financial leverage that can multiply yield on investment, provided that returns generated by debt exceed cost. Because the interest paid on debt can be written off as an expense, debt is normally the cheapest type of long-term financing ("Debt", 2009).

Deposit mobilization. The process of actively soliciting deposits by a financial institution.

Development Credit Authority (DCA). Provides partial credit risk guarantees to private-sector lenders to encourage the provision of credit to financially viable businesses and projects that contribute to development goals. There are four basic DCA guarantee structures, but DCA loan portfolio guarantees have been used the most frequently for value-chain finance (VCF) activities. An LPG provides up to 50 percent coverage on net principal losses by a private-sector lender to borrower group specified by USAID. The purpose of an LPG is to encourage a lender to extend credit to borrowers, such as local governments, that are underserved by the financial sector.

Direct VCF. Financial flows between value chain actors. For example, a processor may provide cash or in-kind credit to a small farmer producing mangoes for a company. The credit is repaid when the mangoes are delivered to the processor.

Enabling environment. The system of legal, regulatory and other public institutions and infrastructure that makes sound financial transactions possible.

End market. Indicates where the final transaction takes place in a value chain, typically where the end user is located. An end user is the individual or organization for whom the product or service has been created, and who is not expected to resell that product or service ("End Market", 2009).

Equity. (1) Ownership interest or claim of a holder of common stock (ordinary shares) and some types of preferred stock (preference shares) of a firm. On a balance sheet, equity represents funds contributed by the owners (stockholders) plus retained earnings or minus accumulated losses. (2) Net worth of a person or firm, computed by subtracting total liabilities from total assets. In cooperatives, equity represents members' investment plus retained earnings or minus losses ("Equity", 2009).

Financial institution. An entity — regulated or not — that specializes in the provision of financial services.

Financial intermediary. A financial institution that collects deposits and lends these deposits.

Index-based insurance. A special form of insurance that can be used to insure against types of risk that are typically uninsurable with traditional insurance, such as natural disasters. Index insurance can be used where there is an objective measurable event (extremes in rainfall, wind speed, freeze, extreme heat, etc.) that demonstrates a strong correlation with a variable of interest (e.g., crop yields or loan default rates).

Inputs. Components of agricultural production, such as seed, fertilizer, or tillage.

Leasing. A method of financing through the acquisition/use of fixed assets, predicated on the concept that the value of an asset is in its use in the business rather than through ownership. Leases are typically used to finance equipment, but can also be used for buildings and improvements and are commonly used to finance vehicles.

Line of credit. The extent to which a seller will extend credit payment terms to a buyer or bank. It is the total amount of (a) unpaid invoices, (b) goods in transit, and (c) orders confirmed but yet but yet to be shipped, or loans (”Line of credit”, 2009).

Microfinance institution. An organization that provides financial services to the poor. This broad definition includes a wide range of providers with varied legal structures, missions, methodologies, and sustainability, but which all share the characteristic of providing financial services to a clientele poorer and more vulnerable than traditional bank clients.

Movable property. Any property or asset other than land and buildings; for example, cars, bank accounts, wages, securities, a small business, furniture, insurance policies, and jewelry. Often referred to as personal property or chattel.

Moral hazard. The potential loss by a lender due to uncertainties and imperfections in markets that arises from the character and circumstances of individuals rather than the inherent nature of the business. An example is a borrower taking a risky action unknown to the lender (term used more commonly in insurance).

Outgrower schemes. Loans that are tied to purchase agreements. In outgrower schemes, sellers have more formal or captive relationships with buyers, who in turn commit to providing additional services, such as marketing and technical assistance. This increased level of commitment is more appropriate for buyers and sellers of high-value, specialty products.

Public-private partnership (PPP*).* A form of private-sector participation in the financing and provision of municipal services and infrastructure. A PPP is characterized by private-sector management of the project company with a public entity or municipality retaining a significant stake and sometimes the majority of the share capital.

Risk management. Policies, procedures, and practices involved in the identification, analysis, assessment, control and avoidance, minimization, or elimination of unacceptable risks (”Risk management”, 2009).

Registry. A government agency that keeps a public register of information such as company records and land titles (i.e., collateral registry or credit registry) (”Registry”, 2009).

Rural finance. A field of work in which people aim to improve rural communities’ access to efficient, sustainable financial services.

Secured lending. The pledging of an asset — any marketable property — as collateral by a borrower to a lender until a loan is paid back. The asset that is pledged as collateral may be immovable or movable property.

Term loan. An asset-based, short-term (usually one to five years) loan payable in a fixed number of equal installments. Term loans are generally provided as working capital for acquiring income producing assets (machinery, equipment, inventory) that generate the cash flows for repayment of the loan (“Term loan”, 2009).

Transaction costs. Costs arising from the transfer of ownership or property rights, such as in making and recovering a loan, including explicit costs and the time required for the transaction.

Transformation. A common term used to refer to how food is conserved, preserved, or processed to make it last longer.

Trust. A fiduciary relationship in which a trustee holds title of assets for a beneficiary. Trusts are increasingly used to hold wholesale funds that are lent to financial institutions for specific types of investment, upon demonstrating that they meet the qualification criteria.

Upgrading. Activities undertaken at the first or industry level to improve productivity to enable effective responses to market opportunities or increased competitiveness of all activities in a product's value chain. There are five types of upgrading at the firm level: process upgrading, product upgrading, functional upgrading, channel upgrading, and inter-sectoral upgrading ("Upgrading", 2009).

Value chain. The full range of activities and services required to bring a product or service from conception to sale in its final local, national, regional, or global markets. Value chains include input suppliers, producers, processors, and buyers. They are supported by a range of technical, business, and financial service providers ("Chain Analysis", 2009).

Value chain analysis. The process for understanding the systemic factors and conditions under which a value chain and its firms can achieve higher levels of performance ("Chain Analysis", 2009).

Value chain approach. Seeks to facilitate changes in a firm's behavior that increase the competitiveness of the chain and generate wealth for all participating firms, with the aim of contributing to equitable economic growth (Stallard, 2009).

Value chain finance (VCF). Finance that flows to or among value-chain members, including the smallest microenterprises and the largest multinational company. VCF may be direct or indirect.

Warehouse receipt. A document that provides proof of ownership of commodities (e.g., bars of copper) that are stored in a warehouse, vault, or depository for safekeeping. Warehouse receipts may be negotiable or non-negotiable. Negotiable warehouse receipts allow transfer of ownership without requiring the delivery of the physical commodity.

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ANNEX C. DIAGNOSTIC CHECKLIST

KEY QUESTIONS	YES	NO	COMMENTS/RESPONSES
Food Security			
1. Have the food insecure been identified in terms of where they are concentrated geographically and the nature of their food insecurity?			Disaggregated national poverty and production statistics and vulnerability mapping can be used to assess the prevalence and nature of food security levels.
2. What do the food insecure depend on for their livelihoods? Do opportunities exist for improving these livelihoods and/or assisting the food insecure transition into more profitable livelihoods? Do RAF activities have a role to play in this process? If so, which activities are most promising?.			Some of this information should be available from existing food security assessments and strategies, information on the location of the food insecure, and the nature of their livelihoods. However, RAF assessments will be needed to develop more details on whether RAF activities have a role to play in this process, which approaches would be more effective under what circumstances, and the constraints to their use.
3. Will the more food insecure be able to participate in the RAF programs that are under consideration?			Some poorer clients may not have sufficient knowledge, skills, access to collateral to be able to participate in some RAF programs, short-comings which might be dealt with by making adaptations in the RAF program, providing more skills training, for example, and/or utilizing one time asset transfers to facilitate participation.
4. Do opportunities exist for using RAF to have a more direct impact on improving the diets of the food insecure?			Opportunities may exist for expanding training and technical assistance activities to include guidance on how to use income increases more effectively to improve family diets (e.g., adding modules on family diets and household budgeting). Opportunities may also exist for using RAF activities to promote the production of food products that would add value to local diets but are not available locally or are too expensive.
5. Is child malnutrition a problem? If so, do other opportunities exist to positively affect food utilization?			Community-based health and nutrition programs may exist that can be linked to RAF programs. Opportunities may also exist for adding technical assistance and training, such as on improving health, hygiene, and infant and young child-feeding practices.
6. Does price instability contribute to food insecurity?			Consider addressing monetary policy and/or using insurance and other pricing risk mitigation tools.
RAF Enabling Environment			
1. Has government avoided subsidizing or directly lending to farmers or rural poor?			If not, it will be more difficult to convince private sector to invest in RAF. Additional incentives to lower risk and protect returns might be needed.
2. Does the current regulatory framework encourage rural outreach?			Lower capital requirements to start a financial institution and laws that encourage competition tend to result in better rural outreach at lower costs.
3. Do land titling and contract laws (and enforcement) facilitate the use of land as collateral?			If not, guarantees may be needed in order to create RAF supply, especially for larger agricultural loans.

KEY QUESTIONS	YES	NO	COMMENTS/RESPONSES
4. Does the country have a collateral registry?			If not, this limits the type of products that can be offered and requires other risk mitigation.
5. Does the country have a credit bureau or credit-reporting agency?			The broader the coverage and data available, the less risk to financiers.
6. Are there adequate consumer protection laws and enforcement mechanisms in place?			Can be important for reducing risk associated with programs involving financial intermediation.
7. Is the regulatory environment conducive to electronic banking?			Use of technology to facilitate electronic and mobile banking is also limited by telecommunications infrastructure and outreach (e.g., the number of cell phone users).
Rural and Agricultural Finance Providers			
1. Do many formal financial institutions (including insurance companies) serve rural clients in general and farmers, in particular?			If few formal institutions are involved, may need to identify more informal approaches, such as working through microfinance nongovernment organizations.
2. Are there non-formal financiers, such as microfinance nongovernmental organizations or lead firms within a value chain that offer rural and/or agricultural finance?			These generally have lower outreach, but can be used to make the case to other financial institutions that RAF can be profitable and risks can be managed.
3. Do the current RAF products and terms address client needs?			Can identify gaps that the program might want to address, such as credit for high-quality seeds, fertilizer, irrigation, and to build or purchase warehouses.
4. Are there any innovative approaches being used to expand RAF?			Could include innovative lending methodologies or distribution technologies that could be scaled up.
5. Do financial institutions understand agricultural markets and how to assess related business opportunities?			Most experienced agricultural financiers train agricultural specialists to design appropriate products and make good loans.
6. Are there adequate points of service from which to offer RAF?			It is generally easier to build RAF off of existing branch infrastructure than to try to start it in areas without it.
Rural and Agricultural Markets			
1. Do other economic opportunities (e.g., higher-valued products with increasing demand in national, regional, and international markets) exist that could be taken advantage of to expand rural and agricultural markets?			Avoid focusing on only current domestic production and staple crops — there are often better opportunities to improve incomes that would make a bigger impact on food security.
2. Are there large firms that represent potential buyers to those growth markets?			Such firms can often supply information on global market demands, quality and price.
3. Are there adequate roads, irrigation and other infrastructure to support rural and agricultural markets?			These factors affect rural profit potential and financial institutions' ability to serve the area.

KEY QUESTIONS	YES	NO	COMMENTS/RESPONSES
Rural and Agricultural Finance Users			
1. Has an assessment or market research been conducted to identify the greatest constraints to the rural poor's access to finance?			Rural poor are often less concerned about cost in terms of interest rate than transaction costs related to transportation and losing work time.
2. Are RAF products diversified and designed to address the many needs of their users?			Compare RAF user needs with current supply to identify gaps in product and service delivery.
3. Do the rural poor, especially farmers, have collateral (land, equipment or other assets) that could guarantee a loan?			If not, products and loan sizes are somewhat limited. Guarantees or other risk mitigation needed.
4. Do rural poor know how to work with a financial institution?			Technical assistance might be needed to strengthen financial literacy.

ANNEX D. MODEL SCOPE OF WORK

Rural and Agricultural Finance within a Comprehensive Food Security Strategy

The purpose of this scope of work is to assist U.S. government program designers to structure effective programming in rural and agricultural finance in support of a comprehensive food security strategic framework for a specific country. This scope of work assumes that background research has been conducted on the nature of food insecurity in the country, including the population's food availability, access, and usage (including nutrition and health impacts).

I. Objective

[This section should define the broad objectives that the project is to achieve (i.e., "where we want to be"). As possible, these should be quantifiable, but include qualitative results.]

II. Background and Rationale

[This section includes the "where we are" of the business planning process. Include paragraphs citing USAID mission strategy, programming, and other concerns that place the content of the scope of work in broader context and highlight any specific expectations of the project. Note the countries' current levels of poverty and food insecurity and any related issues keeping them from being addressed. Include background information on what the government and other donors are already doing to address these issues.]

Common issues include:

- High rates of illiteracy
- Outdated agricultural practices and services
- High rates of unemployed and unskilled workers
- Limited savings or physical capital for collateral
- Banks consider rural and agricultural finance too high risk
- Weak and/or corrupt private and public institutions
- Non-supportive policy and regulatory environment
- Undeveloped insurance market
- Inappropriate donor and/or government interventions, resulting in damaged markets

[Note: These issues are likely to apply to many countries. This section should identify specific factors that the project will impact, and if possible, establish the baseline against which progress can be measured.]

III. Tasks and Activities

[This section should cover the "how we get from where we are to where we want to be."]

Consider including the following activities under this scope of work:

1. Clarify the food security objectives for the RAF activities (e.g., the target population(s) and whether the primary focus will be on improving food access or availability).

2. Review documents related to the food insecurity in the country (e.g., assessments and strategies related to food security, poverty, livelihoods, and vulnerability).

3. Research the current state of RAF in the country, including assessments of market demand vs. supply; highlight the opportunities that offer the greatest potential to reduce poverty and food insecurity.
    a. Analyze constraints to agricultural credit; design, test, and disseminate cost-effective mechanisms to ensure timely credit availability for improved technology adoption and increased productivity.
    b. Analyze the policy and regulatory constraints to the development of a robust agribusiness sector as they relate to access to financial services.

4. Conduct baseline surveys and develop databases of information highlighting opportunities in rural and agricultural business.

5. Identify current and potential providers of RAF, the products and services they provide, and the constraints to expanding their operations.

6. Consider using USAID's DCA or other guarantee mechanisms to entice new RAF entrants, and monitor and demonstrate effective mechanisms to reduce credit risks.

7. Include guiding principles for what type of crops, businesses, and activities to support (e.g., emphasis on market-driven approaches and coordination with other programs).

8. Promote opportunities that support:
    a. Farmers' abilities to grow more food (based on market demand), diversify crops, reduce post-harvest losses, increase sales, and increase incomes.
    b. The expansion of competitive rural and agricultural value chains, by addressing financial, technical, and policy constraints.
    c. The development of rural, non-farm enterprises, particularly those linked to competitive rural and agricultural value chains, as well as those providing goods and services in rural communities.
    d. The development of RAF suppliers, by forging collaborative agreements to provide them technical assistance and institution-building support, including product development and delivery mechanisms.
    e. The use of new technologies to reduce transaction costs of serving RAF, such as mobile or cell phone banking.
    f. The use of local training institutions and technical assistance providers, ensuring that all capacity-building activities are designed to develop long-term local potential.
    g. Local advocacy and removal of policy barriers that hinder RAF and the use of new technologies.
    h. The regular monitoring of approaches and results and the sharing of information among program beneficiaries and other RAF programs.

9. Organize stakeholder meetings to address information asymmetries, promote market opportunities, overcome misconceptions, and brainstorm ways to overcome hurdles to rural and agricultural finance.

10. To the extent possible, incorporate the following cross-cutting themes: gender, youth, health, water and sanitation, and effective management of natural resources.

Depending on the country and program context, below are additional illustrative activities to consider:

1. Test the feasibility of a voucher program for commercially accessing agricultural inputs such as seeds, pesticides, and fertilizers.

2. Support and strengthen reliable rural agricultural input outlets.

3. Research the current state of rural infrastructure project finance and municipal finance in the country, including assessments of market demand vs. supply of medium and long term infrastructure funding; highlight the opportunities that offer the greatest potential to reduce poverty and food insecurity by addressing rural infrastructure development needs.

4. Support the development of sub-sovereign bonds as important instruments to consider when exploring models of sustainable rural infrastructure project finance.

5. Identify key actors from the public and private sector involved in sub-sovereign finance (if any) and their various roles in supporting sub-sovereign bond issues.

6. Improve value chain infrastructure support services such as warehousing, processing, and transport.

7. Support the development of municipal infrastructure finance and the issuance of sub-sovereign bonds, including forging collaborative agreements with local governments to provide them technical assistance and institution-building support.

8. Organize stakeholder meetings; including participating municipalities to address the level of understanding of sub-sovereign finance, overcome misconceptions, and brainstorm ways to overcome hurdles to rural and agricultural infrastructure financing mechanisms and sources.

9. Work with private financial institutions and non-bank financial institutions (or suppliers/producers) if appropriate to improve the access of farmers to small scale infrastructure development finance mechanisms. Address small-scale physical infrastructure constraints and challenges.

IV. Conclusions & Recommended Interventions

Through regular project monitoring, USAID should be able to assess its overall impact on food security, especially through proxies, such as the number of poor with increased access to RAF. In addition, it should ensure that it regularly collects and assesses data related to the specific approaches and partners involved in the program. To facilitate USAID's dissemination of high-impact results, the program should regularly highlight the following:

- Results by specific activities, including lessons learned in the implementation process, what made it more or less difficult to implement, and what could have been handled differently.
- Results by specific implementers, including what skill sets were particularly important, needed to be developed.
- Results by type of financial institution or product-type, including terms and conditions, repayment rates, and delivery methods.
- Results by client type (e.g., farmers vs. other rural firms, women vs. men, clients needing additional assistance vs. standard clients).
- Lessons from applying or attempting various approaches, techniques, or tools, such as the use of a new technology or methodology.

To the extent possible, related costs should be assessed to identify which activities and approaches were most cost-effective in achieving significant impact, as well as which types of client needs are the most difficult to serve and why.

V. Next Steps

Once USAID/(country) has determined which activities it will support, it should develop a planning document that includes the specific activities to be implemented, linked to the timeline and level of effort, budget, and other resources that will be required.

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