PROMOTING INVESTMENT IN AGRICULTURAL PRODUCTION: INCREASING LEGAL TOOLS FOR SMALL TO MEDIUM FARMERS

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“Defeating hunger is a realistic goal for our time, as long as lasting political, economic, financial and technical solutions are adopted.”

Jacques Diouf, Director-General of the U.N. Food and Agriculture Organization

“We also should remember that Food is good business. When nations solve the problem it fuels their economy.”

Josette Sheeran, Executive Director of the World Food Programme

Since 2000, the demand for agricultural commodities has increasingly outstripped supply, leading to high food prices and chronic hunger in low-income countries. The number of undernourished people in the world is currently estimated at 925 million, and the future does not look any brighter. Projections show that the world’s population will be approximately 9.1 billion in 2050. In order to feed that many people, the world’s food production must increase by some seventy percent and production in low-income countries must nearly double.

Many believe improving the productivity of smallholder farmers will ensure food security in low-income countries. Suggestions for improving productivity include the obvious: better fertilizer, improved seed, and supplemental irrigation and water harvesting to offset dry spells and extend growing seasons. Suggestions also include the less obvious: changing and developing legal frameworks to promote agricultural financing. There is a dearth of financing and government support available to smallholder farmers in low-income countries, and as a result most are caught in a cycle of subsistence farming, constrained by their inability to leverage the assets they have to purchase necessary supplies and equipment. However, there is hope as several international organizations have participated in a vast amount of research, legal text creation and harmonizing law. These projects, when viewed in conjunction with one another, could potentially present a full package of transnational commercial law texts that can promote investment in agricultural production.

2 Id.
This paper surveys the various legal texts promulgated by various international organizations. In doing so, the paper identifies various gaps in coverage and areas in need of reform to assist agricultural financing. It concludes by calling for international organizations to: (1) coordinate amongst institutions and activities to improve agricultural finance policy; (2) develop soft law instruments that focus on agricultural finance; and (3) work with local and regional entities to improve judicial enforcement of legal rights.

I. INTRODUCTION

With a child strapped around her back, Amina weeds maize in an arid field in Sierra Leone. For her family and millions like it, subsistence farming provides their only chance of survival. To break free from her cycle of poverty, Amina requires a comprehensive legal framework that supports her need to increase her productivity.3

Amina’s land has been in her family for decades, however, there are no official records showing that she owns it. Amina worries daily about someone, such as a government official, a representative from a multinational company or another farmer, coming to seize her land. She knows that as a single mother with three children, there would be little she could do to stop it.

As she works in the field, she thinks about the aid worker who told her that she could purchase a seed that would help her double her land’s yield. She remembers her visit to a nearby farm using the new seed, and she still cannot believe how the dry, brown land was transformed into a fertile, green field. Amina wishes she were able to buy the seed, but because she has very little cash on hand and no way to access credit, it is impossible. The only bank in her area is a two-hour walk, and it rarely provides loans to farmers like her. As a result, Amina is unable to purchase not only quality seed but she is also unable to purchase new equipment, irrigation systems and better fertilizer.

Amina’s cash reserves are close to nonexistent because a drought has plagued her region of Sierra Leone for the past year and she has spent almost all of her savings to make it through the year. Without the ability to purchase insurance or access credit, Amina is completely exposed to the ups and downs of the agricultural livelihood.

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3 This article will focus on legal reform efforts that are ongoing or are in need. The article will not consider many of the other things that are needed, such as access to water, environmental and farming regulation, commodity-trading partnerships, physical infrastructure and similar important areas.
Furthermore, even if Amina were able to produce more food than her family needs to survive, she doubts she could receive fair prices for her maize. She often thinks that if she had some kind of guarantee that people would buy her excess supply at a fair price, she would take the risk and produce it. She also thinks that if she had a place where she could store her crop, she could wait for opportune times to sell.

Amina’s story demonstrates that farmers from Tennessee to Rajasthan and Sierra Leone need the same things in order to be successful: land, water, seed or livestock, equipment and human capital, none of which can be procured in amounts necessary to move beyond subsistence farming without access to finance. Part II of this paper assesses, on a very general level, the need for agricultural financing and the potential utility of utilizing, harmonizing and modernizing transnational commercial law texts to help secure such financing. Part III surveys the transnational legal texts, including conventions, model laws and legislative guides, which can potentially be used by low-income countries to help them create a legal environment that supports financing for farmers. Finally, Part IV of this paper identifies various gaps in coverage and areas in need of reform to assist agricultural financing, and it concludes by calling for international organizations to: (1) coordinate amongst institutions and activities to improve agricultural finance policy; (2) develop soft law instruments that focus on agricultural finance; and (3) work with local and regional entities to improve judicial enforcement of legal rights.

II. THE SCOPE OF THE PROBLEM

Since 2000, the demand for agricultural commodities has increasingly outstripped supply, leading to high food prices and chronic hunger in low-income countries.\(^4\) The number of undernourished individuals in the world is currently estimated at 925 million and the future does not look any brighter.\(^5\) Projections show that the world’s population will be approximately 9.1 billion in 2050, and in order to feed that many

\(^4\) We use the World Bank’s definition of “low-income” to describe countries whose gross national income per capita is less than $1,035 and whose population is over 30,000. \textit{How We Classify Countries}, WORLD BANK, http://data.worldbank.org/about/country-classifications (last visited Oct. 29, 2013); \textit{see infra} app. A.

people, the world’s food production must increase by some seventy percent and production in low-income countries must nearly double.6

There have been many signals by the international community of a political willingness to address the problems of world poverty and hunger, such as the setting of the U.N. Millennium Development Goals, the Poverty Reduction Strategy Papers process and Heavily Indebted Poor Country Initiative.7 In response to these signals, many have argued that boosting productivity of rural smallholder farmers will ensure food security for farmers and their communities.8

There are approximately 500 million smallholders, also called small and medium-sized enterprise (SME), farms worldwide.9 In Asia and Sub-Saharan Africa specifically, these farmers produce about eighty percent of the food consumed.10 Suggestions for improving productivity of these smallholder farms include the obvious: better fertilizer, improved seed, and supplemental irrigation and water harvesting to offset dry spells and extend growing seasons.11 Suggestions also include the less obvious: changing and developing legal frameworks to promote agriculture financing.12 For SMEs in particular, agricultural financing includes short-term, medium-term, and long-term loans, leasing, savings, payment services, and crop and livestock insurance.13

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6 WORLD SUMMIT ON FOOD SEC., FEEDING THE WORLD, ERADICATING HUNGER 2 (2009).
9 Nwanze, supra note 8.
10 Id.
11 Id.
13 SCALING UP ACCESS TO FINANCE FOR AGRICULTURAL SMEs, POLICY REVIEW AND RECOMMENDATIONS, INT’L FIN. CORP. 9 (2011) [hereinafter INT’L FIN. CORP.].
For the past twenty years, there has been a steep decline in the availability of financial resources for agriculture and rural development.\textsuperscript{14} On the African continent for example, despite the agricultural sector’s enormous share of employment and GDP, agricultural lending constitutes less than one percent of all commercial lending on the continent.\textsuperscript{15} Several factors have contributed to the lack of financial resources. First, the macroeconomic instability in rural areas, especially as it relates to inflation, makes it difficult for bank and non-bank financial intermediaries to provide loans.\textsuperscript{16} Second, rural development has been stymied in almost all low-income countries by policies that favor industry over agriculture and urban areas over rural areas.\textsuperscript{17} Third, in agriculture there is considerable lag time between capital investments and increased cash flows, which requires longer loan maturities and irregular repayment schedules.\textsuperscript{18} Fourth, more than many other sectors of the economy, profitability of SME farms depends largely on external factors such as weather, outbreaks of pests and diseases, prices of inputs and outputs, and the health of individual farmers.\textsuperscript{19} Fifth, commercial banks are not interested in lending in rural agricultural areas in low-income countries because of their poor legal and financial infrastructures.\textsuperscript{20}

Lack of sufficient legal and financial infrastructures in low-income countries is perhaps one of the biggest hindrances for SME agricultural financing. According to the law and finance theory developed by Professor Rafael La Porta, countries’ financial systems will flourish if they have legal systems that enforce private property rights, support private contractual arrangements and protect the legal rights of investor.\textsuperscript{21} By contrast, legal

\begin{footnotesize}
\begin{enumerate}
\item[(14)] For example, between 1983–1987 and 1998–2000, the annual average allocations of Official Development Assistance (ODA) for agriculture in the least-developed and other low-income countries fell by fifty-seven percent from $5.14 billion (2002 prices) to $2.22 billion. Anriquez \& Stamoulis, \textit{supra} note 8, at 6.
\item[(15)] Jonathan Campaigne \& Tom Rausch, \textit{Bundling Development Services with Agricultural Finance: The Experience of DrumNet}, in \textit{INNOVATIONS IN RURAL AND AGRICULTURE FINANCE} (Renate Kloeppinger-Todd \& Manohar Sharma eds., 2010).
\item[(16)] Yaron \& Benjamin, \textit{supra} note 12, at 40.
\item[(17)] \textit{Id}.
\item[(18)] \textit{INT’L FIN. CORP.}, \textit{supra} note 13, at 70.
\item[(19)] \textit{Id}. at 18.
\item[(20)] Gerard van Empel, \textit{Rural Banking in Africa: The Rabobank Approach}, in \textit{INNOVATIONS IN RURAL AND AGRICULTURE FINANCE} (Renate Kloeppinger-Todd \& Manohar Sharma eds., 2010).
\item[(21)] Rafael La Porta et al., \textit{Investor Protection and Corporate Valuation}, 57 \textit{J. FIN.} 1147 (2002); Ross Levine, \textit{The Legal Environment, Banks, and Long-Run Economic Growth}, 30 \textit{J. MONEY, CREDIT \& BANKING} 596 (1998); Ross Levine,
\end{enumerate}
\end{footnotesize}
systems that neither support private property rights nor facilitate private contracting inhibit financing and stunt financial growth.

The World Justice Project (WJP), an independent, non-profit organization, has created the Rule of Law Index to examine and compare the legal infrastructures of a variety of countries. One of the factors in the WJP’s Scores and Rankings is the “Civil Justice” measure. It assesses the degree to which a country’s legal system is “accessible, affordable, effective, impartial, and culturally competent” using seven key sub-factors. The sub-factors are designated as follows: 7.1 People can access and afford civil justice; 7.2 Civil justice is free of discrimination; 7.3 Civil justice is free of corruption; 7.4 Civil justice is free of improper government influence; 7.5 Civil justice is not subject to unreasonable delays; 7.6 Civil justice is effectively enforced; 7.7 ADRs are accessible, impartial and effective. Looking at just a few of the factors from a sampling of the low-income countries compared to Germany, South Korea and the United Kingdom, one can begin to see the serious problems low-income countries face.


22 Mark David Agrast et al., World Justice Project, World Justice Project Rule of Law Index 2011, RULE OF L. INDEX 117 (2011), available at http://worldjusticeproject.org/sites/default/files/WJP_Rule_of_Law_Index_2011_Report.pdf. (Describing the survey as being “administered to a representative sample of the general public, and to local experts, and then are analyzed and cross-checked pursuant to a rigorous triangulation methodology . . . The outcome of this exercise is one of the world’s most comprehensive data sets of the extent to which countries adhere to the rule of law in practice. The 2011 Rule of Law Index builds on more than 400 variables drawn from the assessments of more than 66,000 people and 2,000 local experts in 66 countries.”).

23 Id. (According to Professor Mauro Cappelletti, there are three main obstacles that make civil and political liberties inaccessible in many parts of the world. First, due to economic reasons, individuals are unable to access information or adequate representation. Second, due to organizational obstacles, the isolated individual lacks sufficient motivation, power, and information to initiate and pursue litigation. Third, procedural processes are sometimes inadequate, that is, traditional contentious litigation in court might not be the best possible way to provide effective vindication rights for many individuals.); Mauro Cappelletti, Alternative Dispute Resolution Processes Within the Framework of the World-wide Access-to-Justice Movement, 56 MODERN L. REV. 282, 283–84 (1993).

Civil Justice Tables\textsuperscript{25}

7.3 Civil Justice is Free of Corruption

\textsuperscript{25} See id.
Without sufficient access to civil justice, farmers in low-income countries are part of the approximately four billion people in the world who are excluded from the rule of law. Their lives and livelihoods are instead...
guided by informal systems that do not allow them to utilize legal frameworks to secure financing.\textsuperscript{26} Furthermore, agricultural financing has been deemed by the International Finance Corporation of the World Bank (IFC) as a “policy orphan—too often responsibility for policies impacting agricultural finance falls into a void among several government ministries, such as finance, agriculture, planning, trade, and commerce.”\textsuperscript{27} Accordingly, the subject of agricultural financing is often ignored, inhibiting the development of strong and responsible agriculture finance policies and supportive underlying legal and regulatory systems.\textsuperscript{28}

III. EFFORTS ARE UNDERWAY TO ASSIST IN DEVELOPMENT

Agricultural economists estimate “that agricultural production needs to increase by 70 percent by 2050 in order to feed the world, while demographic growth, climate change and urbanization put pressure on available cultivable land. Three-quarters of the world’s poor live in rural areas and more than 80 percent of them either directly or indirectly depend on agriculture for their livelihoods.”\textsuperscript{29} Thus, “in low-income countries, the agriculture sector is vital for both poverty reduction and economic growth.”\textsuperscript{30}

“There is now broad support for more and better investments to increase agricultural production, to improve marketing of commodities and to combat poverty. However, there are no quick political fixes and the provision of sustainable financial services for agriculture has proven to be difficult.”\textsuperscript{31} The past years have demonstrated that neither commercial banks\textsuperscript{32} nor the emerging microfinance industry\textsuperscript{33} are willing or able to


\textsuperscript{27} INT’L FIN. CORP., supra note 13, at 22.

\textsuperscript{28} Id.

\textsuperscript{29} Id. at 6.

\textsuperscript{30} Id.

\textsuperscript{31} Id.

\textsuperscript{32} Van Empel, supra note 20.

\textsuperscript{33} Micro-finance institutions, which have provided innovative instruments to millions of previously un-bankable clients, have also been unable to reach rural farmers whose livelihoods are characterized by highly seasonal investments, risks and returns. See D.C. RWEYEMAMU ET AL., ASSESSING MICRO-FINANCE SERVICES IN AGRICULTURAL SECTOR DEVELOPMENT: A CASE STUDY OF SEMI-FORMAL FINANCIAL INSTITUTIONS IN TANZANIA, INT’L FOOD POL’Y RES. INST.; REACHING THE POOR: A CALL TO ACTION 12 (Daniel Nielson ed., 2004); World Development
sufficiently meet the financial needs for SME farms, leaving farmers underserved in the so-called “missing middle.”

Furthermore, governments have tried to step in to help farmers secure financing through state-run agriculture banks. However, many of these government-sponsored lending programs have generally failed because they were stymied by red tape and executed poorly. In addition, borrowers considered these government-sponsored loans to be grants; thus, the banks suffered from poor loan-recovery rates. As a result, losses by state-run banks, supported by multilateral development banks and some bilateral lenders, have run into the billions of dollars.

As mentioned above, the problems with agricultural financing in low-income countries are many. Most discussions related to agricultural financing—such as the need to undertake a detailed baseline diagnosis of the supply and demand for agricultural finance at the country level—are well beyond the scope of this paper. The limited focus of this paper is to explore the coordination of international policies intersecting both the financial and agriculture sectors, with this section beginning to explore the global efforts to improve the legal structures that are hindering the access to finance for SME farmers.

A. Commercial Contracts in General

Contract law forms the backbone of the majority of transactions in the agricultural industry, such as the sale and lease of farmland, contract farming arrangements, livestock production contracts, etc. However, in low-income countries, contract law is often characterized as informal, whereby contract creation and enforcement is recognized by local customs. These informal arrangements often do not translate into enforceable contracts in courts of law and make for securing loans,

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Report 2008 Agriculture for Development, WORLD BANK 13 (2007) (Farmers cite lack of information and high microloan interest rates as the main reasons they are unable to obtain micro-financing.); Frank Girabi & Agnes Elishadai Godfrey Mwakaje, Impact of Microfinance on Smallholder Farm Productivity in Tanzania: The Case of Iramba District, 3 ASIAN ECON. & FIN. REV. 227 (2013).


35 Van Empel, supra note 20.


protecting legal rights and insisting upon performance an almost impossible task.

Scholars and legal draftsmen have long recognized the need to reduce reliance upon informal systems of enforcing rights, especially within “higher levels of [economic] development . . . [involving] large, long-lived, highly asset-specific investments . . . [or] increasingly complex trade in goods and services . . . [especially] outside repeated exchange relationships.”\(^{38}\) As a result, it can be argued that a mix of legal mechanisms is likely to ensure both a fair and efficient contracting, especially in developing countries.\(^{39}\) However, as noted by Nobel Laureate Douglass North, “the inability of societies to develop effective, low-cost enforcement of contracts is the most important source of both historical stagnation and contemporary underdevelopment in the Third World.”\(^{40}\)

Thus, most international policymakers view robust contract law as a domestic and international need, essential for a modern legal system.

As a result, international organizations have promulgated both soft-law and hard-law texts. Soft-law texts are often designed with an eye toward reforming domestic systems use as a guiding tool for reform efforts, while hard-law texts are designed with an eye toward harmonizing particular areas of law across legal systems. Because contract law is essential within a legal system, many legal texts have been promulgated, the majority of which seek to promote wider harmonization of contract and commercial law maxims. Commercial law, especially business-to-business commercial law, is often heralded as one of the most successful harmonization efforts undertaken by international organizations to date. In fact, governments have conducted a process of harmonization of international sale law for more than forty years.\(^{41}\) Today, international sales law is harmonized to a very significant extent through the United Nations Convention on Contracts for International Sale of Goods (CISG),\(^{42}\) which will be discussed later within this section. The importance of these harmonization efforts cannot be overemphasized. As noted by international

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\(^{38}\) See id. (discussing the two alternative views on the importance of contract law in enforcement).

\(^{39}\) See id. at 1577.

\(^{40}\) DOUGLASS C. NORTH, INSTITUTIONS, INSTITUTIONAL CHANGE AND ECONOMIC PERFORMANCE 54 (James Alt & Douglass North eds., 1990).

\(^{41}\) The first Hague Conventions on the sale of goods date back to 1964. See COMMENTARY ON THE UN CONVENTION ON INTERNATIONAL SALE OF GOODS (CISG) I (Peter Schlechtriem & Ingeborg Schwenzer eds., 1998).

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In contrast, the UNIDROIT Principles are a soft law instrument, designed with an eye toward use as a harmonizing text within the world of international commercial contracting. The Principles have been hailed as “a significant step forward in the globalization of legal thinking,” which is especially true when considered within the context of commercial contracts.

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44 “Soft-law” refers to instruments of a normative nature with no legally binding force that are applied only through voluntary acceptance. See Michael Joachim Bonell, Soft Law and Party Autonomy: The Case of the UNIDROIT Principles, 51 Loy. L. Rev. 229 (2005).

The UNIDROIT Principles have been used in a number of national legislatures as a source of inspiration for the reform of their domestic contract laws. 46

Unlike the CISG, the Principles are more comprehensive in coverage, including provisions specific to often ignored areas, such as: formation and authority of agents, hardship and force majeure, limitation periods and third party rights. 47 The inclusion of many of these areas is of high importance to agriculture, as much of the transport and processing networks necessary for commodities involve the use of agents. In addition, the hardship and force majeure provisions are important legal principles within agriculture since parties often need protection from unexpected and unwelcome weather. As a result of this additional and specific coverage, the UNIDROIT Principles provide a wealth of provisions to assist legal reform.

In addition to legal instruments focusing on contract, specific instruments exist that support an e-commerce regime. At the current time, three well-established e-commerce texts exist within the international community: the United Nations Convention on the Use of Electronic Communications in International Contracts, the UNCITRAL Model Law on Electronic Commerce and the UNCITRAL Model Law on Electronic Signatures. All were created to harmonize e-contracting by recognizing electronic documents, records and signatures. 48

B. Commercial Contracts and Farmers

In addition to the efforts described above, many international organizations have begun to work toward developing a harmonized set of commercial contract law, with a specific eye toward the specialized needs of particular industries, including farmers.

1. Equipment Leasing

At the most basic level, farmers depend upon specialized equipment and tools on a daily basis. Agricultural vehicles such as farm tractors and harvesters, in addition to generalized and specialized small range tools, play a key role in agricultural productivity. Unsurprisingly, having the right equipment can help a farmer be more productive and, ultimately, more profitable. However, as emphasized throughout this paper, limited access to credit hinders large-scale purchases of equipment and other high cost items. Equipment leasing provides an alternative to direct lender-to-borrower financing.

Within the area of equipment leasing, the term leasing has grown to include two distinct concepts. In the first concept, as seen in the United States, the term lease is synonymous with the term rental—where someone pays money for the use of a particular item for a specific, well-defined period of time. At the expiration of the lease, the item is returned to its rightful owner who is then able to lease the item to a new party. In the second concept, leasing is a finance device, wherein the lessee selects the equipment that he desires and the lender purchases the equipment on its own behalf. The lender then leases the equipment to the lessee for a period of time. At the end of the lease period, the lessee has the option to acquire ownership of the asset.

To match these two concepts, UNIDROIT has produced two documents: the Model Law on Leasing and the Convention on International Financial Leasing. The Model Law covers the more traditional lease, while the Convention covers the use of the leased equipment as collateral in a lending agreement.

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50 In the United States (and some other regions) this type of lease will likely cause issues as the lease will be considered secured transaction which will then be covered by UCC Article 9.
51 UNIDROIT has also completed the Cape Town Convention and associated protocols. See *Cape Town Convention*, infra Part III.D. In addition, the Ottawa Convention is sometimes also thought to be included in this area of discussion. It, however, is essentially an instrument aimed at the harmonization of contract law in cross-border leasing. This specialization has greatly limited its application. Although a successful instrument, without doubt, it has been excluded, as it is not generally thought to be applicable in the situations discussed within this paper. See discussion, infra Part IV.A.
52 UNIDROIT *MODEL LAW ON LEASING* (2008).
Very few low-income countries have adopted specific leasing laws, resulting in SME farmers needing to purchase or arrange traditional finance prior to acquiring the necessary equipment. The availability of model leasing regulation, be it the traditional leasing arrangements or the more complex financial leasing, will lead to greater opportunity to access finance and choice among the SME farmers. As highlighted by noted authority, Professor Boss:

In many ways the landscape of personal property leasing law has changed drastically with . . . the finalization of the UNIDROIT Convention on International Financial Leasing. . . . [This] codification recognize[s] leasing as a valid and acceptable mode of equipment acquisition that has come of age and is deserving of special treatment through the development of a body of rules uniquely suited to that type of transaction.  

Professors Boss’ statement emphasizes that leasing offers the potential to reduce some of the risks of traditional loan provisions for investment financing in agriculture. Leasing can provide an alternative financing solution for smallholder farmers and rural enterprises with limited collateral and credit history for the acquisition of equipment and other production assets. In addition, leasing helps to circumvent some of the problems related to the registration and foreclosure of collateral and can be used for financing machinery and movable assets such as vehicles and farm equipment. Most importantly, because the lessor often owns the equipment, repossession in case of default is more straightforward, as it does not require court procedures. If a leasing regime is developed, SME farmers will find it easier to access important farming equipment.

2. Contract Farming

According to the Food and Agricultural Organization of the United Nations, contract farming is agricultural production carried out according to an agreement between a buyer and farmers, which establishes conditions

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for the production and marketing of a farm product or products. Typically, the farmer agrees to provide agreed quantities of a specific agricultural product that conforms to quality standards supplied by the buyer. In turn, the buyer commits to purchase the product and, in some cases, to support production through the supply of farm inputs, land preparation, the provision of technical advice, etc.

“Contract farming arrangements reflect multiple commercial practices and their success depends on many elements.” A key element is the capacity of the parties to build stable, commercially sound and fair relationships, based on clear commitments and mutual compliance. In this respect, a reliable legal framework is essential to give legal effect to the parties’ stipulations and to supplement them as needed, particularly because of the imbalance of economic power between the parties that typically characterizes agricultural contracts.

In response to this recognized need, the UNIDROIT Governing Council, at its session held in Rome in May 2012, agreed that UNIDROIT could usefully contribute its contract law expertise to the development of contract farming by preparing a legal guide on contract farming operations. Although the document is in its early stages, the group considered the types of transactions to be covered by the guide, and proceeded on a general discussion of the prospective content of the guide, based on the following draft structure: parties to the contract; contract form and contract formation; parties’ obligations; nonperformance and remedies; duration and renewal of the contract; applicable law; and dispute resolution.

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57 Id.
58 Id.
60 Id.
61 Id.
62 Id.
One of the greatest benefits of such a guide is the comprehensive and specific legal text that will be created. For the first time, an international legal text will exist that is directed specifically to the needs and activities of the farming community. The importance of this cannot be overstated. Should this legal text become a reality, the text will likely impact one of the largest industries that remains without legal specificity in low-income countries.

C. Land-Based Rights

Land tenure refers to the legal system that designates the rights individuals and communities have with regard to land, namely the rights to occupy, use, develop, inherit and transfer it. Most importantly, land-tenure systems ensure rights to land are adequately defined and documented. Secure forms of land tenure can help stimulate productive farm-level investment and financing. Without long-term land-use rights, farmers lack incentives to grow through land expansion, productivity enhancements and long-term investments. In addition, without a secure form of land tenure, lenders are hesitant to allow farmers to pledge land as collateral to obtain financing.

For farmers, secure land tenure rights are necessary ingredients for increasing productivity and reducing poverty. Secured land tenure provides many incentives for smallholders to make investments in their land, such as installing an irrigation infrastructure and preserving land fertility. Without formal property systems, farmers are under the threat of having their land seized. For example, in the 1970s, the Persian Gulf States aimed to transform Sudan into a breadbasket and land rights were

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66 See Alain Durand-Lasserve & Harris Selod, The Formalization of Urban Land Tenure in Developing Countries, in URBAN LAND MARKETS 101 (Somik V. Lall et al. eds., 2009).
67 INT’L FIN. CORP., supra note 13, at 7.
largely ignored. Statistics indicate that some 5.5 million hectares were officially converted to arable land and up to 11 million hectares were encroached upon informally.  

Land tenure systems also facilitate access to credit and other services because unlike personal property, real property is often considered an acceptable form of collateral for traditional bank financing. However, as discussed below, the absence of a land title registration system has been a key obstacle for farmers in accessing agricultural credit within current financing schemes.  

Lastly, land tenure systems facilitate land transfers, which help ensure that land is being put to its most efficient use.

Land tenure is “usually portrayed as either customary/traditional, or state/statutory.” “Customary land tenure is characterized by its largely unwritten nature, is based on local practices and is flexible, negotiable and location specific.” Typically, land rights “stem from rights established through first clearance of land, or conquest.” These customary systems in low-income countries are “continually evolving as a result of diverse factors like cultural interactions, socio-economic change and political processes.” For these reasons, banks do not typically recognize “customary/traditional” land rights because they lack the formality and stability of state administered land tenure systems.

State systems of land tenure are usually based on written laws and regulations. Many of these regimes, however, rely on designs and policies inherited from colonial era powers. As a result, many existing formal registration systems in emerging economies favor the educated and wealthy. For a large portion of the population, especially those who are illiterate, the processes associated with land registration are overwhelmingly complex. The paperwork is almost impossible to fill out without a third party and the ancillary costs for surveying and other supporting documentation are cost-prohibitive. In addition, securing the time and transportation necessary to physically go to the registry office is

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71 See id.
72 See Hanstad, supra note 68, at 65.
75 Id.
76 Id.
77 Id.
78 Id.
79 See Peter Rabley, Empowering Poor Through Property Rights, GEOSPATIAL TODAY, Apr. 2012, at 40.
80 See id.
often impossible, effectively shutting the poor out of land registration in emerging nations altogether.

As a result of the limited access to equitable formal land tenure systems, for over four decades, the international development community has invested hundreds of millions of dollars to bring the world's poor into a legally recognized system of land tenure. Current statistics, however, reveal that many of these well-intentioned endeavors have failed, and in most low-income countries, the majority of the population remains outside any formal system of land tenure. The World Bank has identified a common set of challenges, for which country-specific solutions need to be developed:

(i) incomplete or outdated legal and regulatory frameworks; (ii) rigid land tenure classifications which do not reflect all local ethnic, cultural and legal traditions; (iii) dispersion and overlap of responsibilities across different institutions; (iv) outdated technology that makes land demarcation, regularization and titling a lengthy and expensive process; (v) poor integration of relevant land information systems; (vi) limited accessibility to critical land administration services, including conflict resolution, by some portions of the population; (vii) inadequate mechanisms to ensure transparency, good governance, citizen participation and recourse in the various phases of land administration, from demarcation to titling and enforcement.

As suggested by this list, there are many structural and political issues that must be addressed before effective land tenure systems can be implemented.

There are numerous organizations focused on helping to create and improve land tenure systems. Most notable is the United Nations Committee on World Food Security’s (CFS) development and adoption of the Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security (Guidelines). The Guidelines were supported by the World Bank and Food and Agriculture Organization of the United Nations (FAO) and are the first international instrument on governance of tenure. They outline the

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81 See id.
principles and practices that governments can use when making laws and administering land, fisheries and forest rights. Their overall goal is to “help countries improve their governance of land tenure so as to ensure better food security of their population with special attention given to smallholder farmers, indigenous communities and women’s rights.”84

Other regional efforts to promote land tenure systems have been made by the International Bank for Reconstruction and Development (IBRD)85 and the International Development Association (IDA).86 In addition, the World Bank has partnered with the Global Environment Facility (GEF),87 the UN-Habitat-Global Land Tool Network88 and the G7 Pilot Program to Preserve the Brazilian Amazon89 to promote land tenure systems.

Land tenure rights go hand in hand with land registries. A “land registration system” is defined as any public system of records concerning legal rights to land.90 In general, two categories of land registration systems exist: registration of deeds and registration of title.91 Registration of deeds (called “land recordation” in the United States), involves registering or recording of documents affecting interests in land. The second system is registration of title, which arose out of a belief that a land register should show the actual state of ownership, rather than just provide evidence of ownership.92 Under this type of system, the government guarantees all rights shown in the land register.

90 See Hanstad, supra note 68, at 650.
91 Id.
92 Id.
In many countries, land registries are non-existent or fail to adequately respond to the needs of the community. For example, the IFC’s report entitled Doing Business demonstrates how the timeframes and cost associated with registering property can be unduly burdensome.93

**Time and Cost Involved in Registering Property**

<table>
<thead>
<tr>
<th>Economy</th>
<th>Time (days)</th>
<th>Cost (% of property value)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Afghanistan</td>
<td>250</td>
<td>5.0</td>
</tr>
<tr>
<td>Bangladesh</td>
<td>245</td>
<td>6.8</td>
</tr>
<tr>
<td>Chad</td>
<td>44</td>
<td>17.9</td>
</tr>
<tr>
<td>Liberia</td>
<td>50</td>
<td>13.1</td>
</tr>
<tr>
<td>Madagascar</td>
<td>74</td>
<td>10.5</td>
</tr>
<tr>
<td>Niger</td>
<td>35</td>
<td>11.0</td>
</tr>
<tr>
<td>Sierra Leone</td>
<td>67</td>
<td>11.6</td>
</tr>
<tr>
<td>South Korea</td>
<td>11</td>
<td>5.1</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>29</td>
<td>4.7</td>
</tr>
<tr>
<td>United States</td>
<td>12</td>
<td>3.5</td>
</tr>
</tbody>
</table>

As can be quickly surmised from the table above, land registration delays and cost of registration can be significant in low-income countries compared to other parts of the world, resulting in fewer registrations. Without well-defined and documented land rights to offer as collateral, banks will continue to be unwilling to lend to farmers.94

93 Int’l Fin. Corp. of the World Bank, Registering Property, DOING BUSINESS (June 2013), http://www.doingbusiness.org/data/exploretopics/registering-property (providing statistics based on the time and cost involved in registering property, assuming a standardized case of an entrepreneur who wants to purchase land and a building that is already registered and free of title dispute).

94 See Peter F. Dale & John D. McLaughlin, LAND INFORMATION MANAGEMENT 175 (1988) (explaining that without documented land rights, farmers lack the necessary collateral for most lenders). It is not uncommon for those with
Land registries assist agricultural development in another key manner, the development of a land marketplace. Economists point to the importance of a market in land as a factor in production if latent energy is to be released and productive potentials realized. Thus, it becomes important to provide adequate and efficient machinery to safely transfer interests in land and land registries fill this role.

D. Generating Finance Without the Use of Land

The SME agricultural gap in the financial landscape remains a major challenge to the development of legal reform in generating finance. Unfortunately, the data on agricultural SME finance is unavailable to quantify this gap even on a country level, but there is a consensus that the financing gap is a substantial and persistent problem. The gap of information arises because a significant amount of agricultural credit, if available at all, is provided through informal arrangements, village-level banks, savings and credit cooperatives, and other less formal (and often unregulated) financial institutions. The absence of regulation and monitoring creates many difficulties, as it can further foster existing corruption and “who you know” type of financing.

In addition, the absence of formal land registration and other formalized financing structures allows for non-transparent lending or hidden collateral agreements. The inability to discover prior lending is one of the primary reasons that healthy secured transactions lending environments use registries. It is important to identify financial gaps and to insist upon the formal recognition of informal networks.

Interestingly, one area of reform that has garnered international attention, but not agricultural financial reform, is secured transactions. At the most basic level, secured transactions are an “interest in personal property or fixtures which secures payment or performance of an

knowledge of the new “legalized” property concepts to take advantage of indigenous persons holding customary rights in land. See Hanstad, supra note 68. This must be carefully watched and protected against.


obligation." At the heart of this definition is the age-old concept: the debtor places a particular piece of property at risk to increase the likelihood of payment on the debt, and default results in the loss of the property. While this may seem to be a simplistic finance mechanism, it is not; the creation and enforcement of a secured transactions agreement requires the countries to have an advanced set of legal proscriptions in the areas of contract, property, land tenure, banking, regulation and an effective and expedient enforcements mechanism.

The absence of these necessary legal prescriptions creates barriers to the creation of a secured transactions regime. For example, many legal systems in low-income countries fail to allow creditors, such as banks, finance companies, warehouses, dealers and wholesalers, to take mobile property as collateral to reduce their risk and facilitate financing. Consequently, farmers seeking to grow their businesses must pay incredibly high interest rates or provide some other form of guarantee, typically in the form of real property. Many of these farmers, however, rent or do not “own” real property in a manner that creditors recognize as acceptable collateral, leaving them with little to nothing to use as collateral to secure reasonable financing.

As a result of these limitations—and others—more than half the farms in low-income countries have no access to credit, and in the Middle East and sub-Saharan Africa, the number reaches eighty percent. In a competitive lending environment, the ability to use mobile equipment as collateral would mean that creditors could save money by taking less risk. These savings could then be passed on to farmers in the form of lower fees and better terms. For example, in Albania, adoption of a modern collateral

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97 U.C.C. § 1-201(35).
99 WADE CHANNELL, USAID, BRINGING MORE DEAD CAPITAL TO LIFE, 8 RAFI NOTES (Dec. 2006), http://www.ruralfinance.org/fileadmin/templates/rflc/documents/1179414032263_RAFI1_Note_8.pdf; Inv. Climate Advisory Servs., Secured Transactions Systems And Collateral Registries (Jan. 2010), http://www.ifc.org/wps/wcm/connect/c5be2a0049586021a20ab719583b6d16/SecuredTransactionsSystems.pdf?MOD=AJPERES (seventy-eight percent of the capital stock of businesses in low-income countries is made up of movable assets such as machinery, equipment, or receivables and only twenty-two percent is made up of immovable property).
system in 2001 reduced risk premiums by half and lowered interest rates by five percent. In Peru, a broad range of producers believed that loans for seed, fertilizer, pesticides and fungicides would double output. Furthermore, in industrial countries, borrowers with collateral get nine times the level of credit given their cash flow compared to borrowers without collateral. They also benefit from longer repayment periods (eleven times longer) and significantly lower interest rates (fifty percent lower).

In recent decades, several major international and regional organizations have completed projects to promote secured transactions in movable assets. The largest and most comprehensive secured transactions legal text is UNCITRAL’s Legislative Guide on Secured Transactions. The guide deals with the agreements between credit providers and businesses or individuals. Subject to certain limitations, it is designed to be comprehensive in its reach, both in terms of the range of persons to whom it may apply and also in terms of the assets that may serve as a security. It covers creation of security interests in tangible goods, such as inventory and equipment, and security rights in intangible goods, such as receivables, negotiable instruments, negotiable documents, rights to payment of funds credited to bank accounts, after-acquired property and intellectual property (as long as it is not inconsistent with the national law or international agreements to which the state is a party). It excludes security rights in real estate, securities, financial contracts, aircraft, railway rolling stock, space objects and ships. While the UNCITRAL instrument does not reproduce American terminology, the instrument does mirror the norms reflected in Article 9 of the United States Uniform Commercial Code.

104 Id.
106 GERARD MCCORMACK, SECURED CREDIT AND THE HARMONISATION OF LAW 182 (2011). Of course, several regional organizations have promulgated secured transactions legal texts. For example, the European Bank for Reconstruction and Development (EBRD) has created a model law that uses many of the concepts
The first recommendation in the Guide sets out the key objectives of the model law stating that the law is designed:

(a) To promote low-cost credit by enhancing the availability of secured credit; (b) To allow debtors to use the full value inherent in their assets to support credit; (c) To enable parties to obtain security rights in a simple and efficient manner; (d) To provide for equal treatment of diverse sources of credit and of diverse forms of secured transactions; (e) To validate non-possessory security rights in all types of assets; (f) To enhance certainty and transparency by providing for registration of a notice of a security right in a general security rights registry; (g) To establish clear and predictable priority rules; (h) To allow parties maximum flexibility to negotiate the terms of their security agreement; (j) To balance the interests of all persons affected by a secured transaction; and (k) to harmonize secured transactions laws, including conflict-of-laws rules relating to secured transactions.107

The guide seeks to accomplish these objectives by providing a modern secured-transactions scheme that leads to a greater harmonization of secured transactions law throughout the world and positively impacts international trade.108 While its goals are incredibly desirable, the guide remains merely a guide. In its attempt to be flexible and “useful to States that do not currently have efficient and effective secured transactions laws, [and] States that already have workable laws but wish to modernize these laws and harmonize them with the laws of other States,” it may be hard for countries to create enough momentum to adopt its provisions.109 It has yet

108 Bazinas, supra note 101.
to be seen how the thoughtfully prepared document will actually influence secured transactions internationally.

The most active international organization within the field of secured transactions is UNIDROIT. Various UNIDROIT conventions have been promulgated in recent years, with each convention covering a specific narrow category of asset type. For example, the Convention on International Factoring is applicable to the sale or assignment of short-term receivables arising from an international sale of goods or supply of services and is used to finance the exchange of goods. Unfortunately, the convention was never widely supported due to several shortcomings within the text. The absence of widespread support of the convention should not be read to imply that factoring, especially in commodities trading, is not an important and commonly used financial instrument. The use of a factor allows the sellers within the agricultural industry to sell its accounts receivable (i.e., invoices) to a third party, almost always at discount. This allows farmers to receive cash immediately for invoices that it likely would not be paid on for a period of time.

The Factoring Convention unfortunately was not as well received (or as comprehensive) as some commentators desired resulting in UNCITRAL drafting a comprehensive set of rules called the United Nations Convention on the Assignment of Receivables in International Trade (Receivables Convention). Its applicability is far broader than the Factoring Convention because the former deals with a broad array of receivables, unlike the latter, which deals only with receivables arising out of international transactions involving the sale of goods. In addition, the Receivables Convention also applies to financing practices such as securitization and project finance. As of this writing, only four States have become signatories and only one State has ratified the Convention. However, recently, North American nations have been working towards its adopting the text and it is believed that other nations will follow suit. In a similar manner as factor financing, receivables financing allows a business to sell its invoices at a discount, thus allowing the entity to receive cash today for invoices that have yet to be paid upon by the customer. Most importantly, non-recourse factoring should not be considered a loan. The factoring transaction is often structured as a purchase of a financial asset, namely the accounts receivable. As such, the non-recourse factor assumes

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110 N. ORKUN AKSELI, INTERNATIONAL SECURED TRANSACTIONS LAW 7 (2011).
112 See AKSELI, supra note 110, at 8.
114 See AKSELI, supra note 110, at 8.
the “credit risk” that an account will not collect due solely to the financial inability of account debtor to pay. This transaction removes non-payment risk from the seller and prevents a loan from reducing the creditworthiness of the agricultural enterprise—both highly beneficial aspects of such a transaction.

The most comprehensive and recent attempt to improve the access to credit for farmers comes from UNIDROIT. UNIDROIT is attempting to modify its Convention on International Interests in Mobile Equipment (also known as the Cape Town Convention) to include farming equipment. The Convention has already broken new ground by establishing a substantive law regime for asset-based financing. It created a new legal regime for the creation and enforcement of international interests in highly mobile, ultra expensive goods, specifically, aircraft, trains and space assets. These international interests include security interests, the interest of a lessor under a lease agreement and the interest of seller under a title reservation agreement.

The Cape Town Convention’s structure is unique. It consists of a base convention that operates in conjunction with various protocols. The base convention contains fundamental rules common to all industries covered by the Convention. This structure allows the Convention to respond to the idiosyncratic needs of different industries involved. Such flexibility is a radical departure from traditional approaches to harmonization initiatives because it promotes specialization of the law and speed of implementation while sacrificing, to some degree, the traditional goal of uniformity. Most important within the area of agriculture, the newest proposed protocol, the 4th Protocol, covers mining, construction and agricultural equipment. Although the discussion in relation to advancing the 4th Protocol are in the early stages, should the project go forward it will be yet another financing option for those seeking to acquire farming equipment.

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115 See id. at 13.
117 Id.
119 See id. at 342.
E. Trade Infrastructure

To remain competitive in global markets, countries need the infrastructure and resources to move and export goods quickly and cheaply. Low-income and landlocked countries often lack infrastructure, such as roads that lead to ports, or may be bound by customs and border management issues. While the full infrastructure needs are well beyond this paper, this section will consider the importance of countries creating an environment that facilitate the easy transport and storage of goods.

1. Warehouse Receipts

Warehouse receipt financing, including the appropriate legislation, regulatory and supervisory oversight, and licensing of warehouses, represents an opportunity to lower the vulnerability of farmers to unfavorable prices and conditions, reduce post-harvest losses and increase the flow of credit into supply chains. A well-functioning warehouse receipt system can provide broad benefits such as permitting stored goods to be used as collateral; improving quality, control and inspection of commodities; facilitating investments to increase and improve storage capacity and quality to reduce losses; enhancing marketing within value chains; and supporting the establishment of commodity exchanges. Alternative systems based on collateral-management agreements may provide viable solutions to inventory financing, but may also require relevant legislation, such as registration for movable collateral.

Collateralized commodity finance based on warehouse receipts is a promising way to enhance working capital secured by agricultural commodities. Commodities are stored in licensed and bonded warehouses that issue receipts certifying the amount and quality stored. The owners of the commodity (such as farmers and traders) provide the receipts to lenders in exchange for loans. Except in the case of double or triple cropping, credit obtained after harvest does not directly solve the seasonal need for working capital to plant a new crop. Warehouse receipts overcome this issue as the warehouse receipt is capable of being used as a collateral

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121 Warehouse receipts are a type of document of title that is issued by a warehouse (bailee) to the owner of the goods (consignor) upon the deposit of the goods at the warehouse. Warehouse receipts can be either negotiable or non-negotiable. The negotiable warehouse receipt, like its first cousin the bank draft, has specific legal significance as the rightful possession of the actual receipt gives the holder both the title to the goods as well as the right to transfer the title. Obtaining the status of a warehouse receipt allows the holder to transfer the rights while the goods are still in the possession of the warehouse.
device. As such, warehouse receipts are important tools in the overall infrastructure of agricultural finance.

The absence of a widely recognized warehouse receipt regime means that farmers suffer in terms of finding the best price for their goods and using the market to generate finance. Farmers without storage facilities and transport networks are forced to sell their products at the time of harvest. Unsurprisingly, this greatly disadvantages the price they receive because it prevents them from holding on to their product until the market fluctuates to a heavier demand period. In addition, the absence of warehousing facilities prevents the use of the warehouse receipt as collateral to secure loans forcing farmers to instead rely upon seasonal and weather impacted income streams and land ownership.

As a result of the limitations created by the absence of a widely-recognized legal text covering warehouse receipts, the World Bank has undertaken efforts to create local warehouse receipt systems.\textsuperscript{122} While there has considerable progress with warehouse receipts in places such as Poland, Hungary, Slovakia and Bulgaria, the general experience of low-income countries with warehouse receipt systems is limited.\textsuperscript{123} Moreover, some countries with already existing warehouse receipt legislation have suffered from the lack of political will or government interventionist attitudes that have greatly reduced their usefulness.\textsuperscript{124} As noted international Professor Henry Gabriel points out, no amount of warehouse receipts (or other legal documents for that matter) can make a true difference in an agricultural finance system without the necessary political and economic resources necessary to make the system flourish.\textsuperscript{125} Warehouse receipts are one of the starkest reminders of the absence of basic resources, as the lack of physical warehouses is one of the immediate problems that will need to be addressed in order for any law in relation to warehouse receipts to succeed within the overall agricultural finance system.

2. \textit{Electronic Transferable Records}

The term “electronic transferable record” is generally used to refer to the electronic equivalent of a transferable instrument (negotiable or non-

\begin{footnotesize}
\begin{enumerate}
\item \textsuperscript{122} Daniele Giovannucci et al., \textit{Warehouse Receipts: Facilitating Credit and Commodity Markets}, WORLD BANK, http://go.worldbank.org/P5HD25FQK0 (last visited Nov. 1, 2013).
\item \textsuperscript{123} See id.
\item \textsuperscript{124} See id.
\item \textsuperscript{125} Henry Gabriel, \textit{Warehouse Receipts and Securitization in Agricultural Finance}, \textsc{17 Uniform L. Rev.} 369 (2012).
\end{enumerate}
\end{footnotesize}
Documents of title\textsuperscript{126} can play a key role in warehousing and other aspects of agricultural finance. In addition, transferable instruments\textsuperscript{128} play a key role as a means of payment. As such, work within the area of electronic transferable records is highly relevant to any market that intends to grow its finance industry, its non-domestic transport industry, its payment industry or its commodities industry, all of which are essential to agriculture in local communities.

Because of the highly important area of electronic transferable records and the need to move from a paper world into an electronic one, UNCITRAL has begun to develop a Model Law on Electronic Transferable Records.\textsuperscript{129} Although in the early stages of development, a model law within this semi-contentious area will greatly assist nations in developing a uniform approach to transferable records.

One of the initial issues in the development of the model law concerns terminology. The Working Group on Electronic Commerce determined that the term “negotiability” related to the underlying rights of the holder of the instrument under substantive law, which was not to be covered within the Model Law. As such, the term “transferability” is used


\textsuperscript{127} Documents of title are documents which in the regular course of business or financing are treated as adequately evidencing that the person in possession of such document is entitled to receive, hold, and dispose of the document and the goods indicated therein (subject to any defenses to enforcement of the document). Examples of documents of title include certain transport documents, bills of lading, dock warrants, dock receipts, warehouse receipts, or orders for the delivery of goods.

\textsuperscript{128} Transferable instruments are financial instruments that may contain an unconditional promise to pay a fixed amount of money to the holder of the instrument, or an order to a third party to pay the holder of the instrument. Examples of transferable instruments include promissory notes, bills of exchange, cheques and certificates of deposit. They may also include chattel paper (e.g., retail installment sales contracts, promissory notes secured by an interest in personal property and equipment leases). See United Nations Commission on International Trade Law, Legal Issues Relating to the Use of Electronic Transferable Records, Sept. 8, 2011, A/CN.9/WG.IV/WP.115 (Oct. 10–14, 2011).

in the Model Law so as not to displace substantive local law. As a consequence the term, a “transferable document” or “instrument” would be defined as a document or instrument “that entitles the bearer or beneficiary to claim the delivery of goods or the payment of a sum of money.” This allows the bulk of the documents and instruments necessary for agriculture to remain firmly within the text.

In the Model Law, many issues remain to be resolved, such as: retention and release of electronic transferable records, circulation of electronic transferable records with issues such as control, time of transfer, and the manner of amendments and end of life cycle of electronic transferable records, such as presentation and termination. Perhaps most important to e-commerce is the unresolved issue of the coverage of payment within the draft. This issue will undoubtedly need to be addressed quickly for the remaining draft to move forward.

The importance of the continued efforts in the area of electronic records cannot be overstated as many nations struggle with the use of electronic documents in key areas of transport, such as warehouse receipts and other documents of title. For farmers—and other entities dealing with market fluctuations and the need to store goods while market lows pass—the use of warehouse receipts can be a life saver in terms of the value received for their commodity. Electronic records will also greatly increase the ease of selling goods via a documentary sale. Both of these possibilities will greatly improve SME farmers’ ability to enter a highly competitive, often fluctuating market.

F. Rural Financial and Banking Systems

Growth of a vibrant rural financial system, including a variety of financial institutions, platforms and distribution networks, is critical to supporting growth and development of the agriculture sector. The financial system should foster a mix of diverse financial institutions serving agricultural clients, with standards, oversight and support appropriate to each type of institution. A diverse system can best address demand for financial services beyond credit to include savings, insurance and other products tailored for specific groups.

Rural financial systems, including rural banking has received increased attention as the importance of accessible banking has become more apparent. Advances in technology and communications infrastructure have quickly improved the ability to remotely provide banking services. For

131 See id.
example, the WIZZIT bank in South Africa (a division of the South African Bank of Athens Ltd.) launched its services completely without any physical branches; using only “WIZZkids” (dedicated bank agents) to sign up new customers and distribute “start-packs,” which include a Maestro-branded debit card.\textsuperscript{132} Cash is received via bank transfer, and customer support is provided by internet banking and a call center.\textsuperscript{133}

The availability of mobile banking and payment platforms is essential in terms of developing greater agricultural financial infrastructure, as noted Professor Castellani writes:

\begin{quote}
[I]n many developing countries, especially in Africa, the reach of mobile networks . . . is sufficient to permit the exchange of payment orders with simple technologies. Given the dearth of physical banks and other payment systems in these countries, mobile payments have become a fundamental element of conducting business, and a promising vehicle to promote financial inclusion.\textsuperscript{134}
\end{quote}

The simple fact of the matter is that developing nations have often leapfrogged many nations in terms of technology and mobile telecommunication infrastructure. At an almost staggering rate, telecommunications infrastructure is developing into areas previously thought of as “too remote for banking.” For example, Google has launched its Project Loon with the intention of using solar-powered balloons to deliver the Internet to some of the most remote areas of the world.\textsuperscript{135} Efforts such as Google’s not only improve the communications network of a previously isolated region, but they also open up avenues of mobile banking and payment. As a consequence, more rural areas will have banking services available to them and more individuals will be able to facilitate payment, oftentimes never stepping foot into a bank building.

As the communications network becomes more wide-spread, legal regulation will be necessary to protect and regulate the emerging mobile

\begin{footnotesize}
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\item \textsuperscript{132}See History, WHIZZIT, www.whizzit.co.za/?q=node/197 (last visited Nov. 1, 2013).
\item \textsuperscript{133}See id.
\item \textsuperscript{135}It should be noted that many argue this is not a long-term solution. Not because it will not work, but instead because the infrastructure is developing so quickly that the need will diminish greatly, thereby diminishing the return on cost. See David Talbot, \textit{African Entrepreneurs Deflate Google’s Internet Balloon Idea}, MIT TECH. REV. (June 20, 2013), http://www.technologyreview.com/news/516186/african-entrepreneurs-deflate-googles-internet-balloon-idea/.
\end{enumerate}
\end{footnotesize}
banking and payment facilities. As previously discussed, UNCITRAL has long had the law of electronic commerce which stands to facilitate e-commerce. However, many readers may be unaware that “UNCITRAL adopted the Model Law on International Credit Transfer (MLICT) in 1992 in response to two major changes: the increasing use of electronic means in payment orders, and the shift from a prevalence of debit transfers to a prevalence of credit transfers.” Of course, “mobile payments are more similar in structure to debit transfers than to credit transfers, [however,] the distinction between the two categories is being reduced.”

While the regulatory structure for mobile payments and banking in many areas of the world is growing, much of the developing world has limited regulation, despite having numerous mobile payment providers. For example, Kenya has adopted electronic transactions legislation and a National Payment System Bill; however, neither is generally considered robust enough to protect the various interests within the electronic payment environment. Therefore, Kenya’s Safricom’s M-PESA mobile banking service is susceptible to problems associated with loss of funds and instability. Overall, this may create problems with trust in the environment, thereby eroding long-term viability, or may create problems within the banking sector such that the support for the mobile payments system is unavailable due to a high cost of needing to provide extra fraud protections. As concluded by Professor Castellani:

> [I]t seems that the preparation of uniform enabling legislative or contractual provisions for mobile payments could be useful and timely. The argument against uniformity in payment laws, based on the fact that users, including consumers, may prefer to have a menu of options to choose from, and to bargain conditions individually, may

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136 UNCITRAL MODEL LAW ON INTERNATIONAL CREDIT TRANSFERS (1992); see also Castellani, supra note 134, at 272.
137 Id. (citing Bradley Crawford, International Credit Transfers: The Influence of Article 4A on the Model Law, 19 CAN. BUS. L.J. 166, 180 (1991)).
not apply in a market where service providers are necessarily few due to the licensing system of mobile networks.\textsuperscript{139}

David Cracknell of the Centre for Global Development reports in Kenya “[b]etween 2007 and 2012, Safaricom, has rolled out more than 40,000 mobile payment agents nationwide. Since 2010 a total of ten banks have connected more than 10,600 bank agent.”\textsuperscript{140} Such a payment infrastructure would certainly help SME farmers in rural areas in low-income countries. The World Bank has long insisted and has produced research to support its claim that financial services are key to enhancing economic development and reducing poverty in rural areas.\textsuperscript{141}

G. Improving Investment Through Public-Private Partnerships

According to the United Nations Economic Commission for Europe (UNECE) in 2008:

Over the past fifteen years Governments have been struggling to achieve economic development and competitiveness through improving their basic infrastructure. Increasingly Governments are turning to the private sector for the financing, design, construction and operation of infrastructure projects. Once rare and limited, these public-private partnerships (PPPs) have emerged as an important tool for improving economic competitiveness and infrastructure services.\textsuperscript{142}

In fact, information provided to the UNCITRAL Secretariat estimates that the value of PPPs may exceed one trillion dollars in the next

\textsuperscript{139} Castellani, supra note 134, at 281; see also, Clayton P. Gillette & Steven D. Walt, Uniformity and Diversity in Payment Systems, 83 Chi.-Kent L. Rev. 499 (2008) (discussing the importance of payment systems).


\textsuperscript{142} UNITED NATIONS ECON. COMM’N FOR EUR., GUIDEBOOK ON PROMOTING GOOD GOVERNANCE IN PUBLIC-PRIVATE PARTNERSHIPS (2008). It is important to note that domestic legislation (sometimes general, sometimes industry specific) is more prevalent than one would think. For example, PPP laws have been introduced in Belgium, Italy, Poland, Portugal, Republic of Korea, Brazil and Spain. UNCITRAL, International Colloquium on Public-Private Partnerships (PPPs), Apr. 22, 2013, A/CN.9/782 (May 2–3, 2013).
five years in India alone; they are increasingly used in China and other countries in Asia and the Pacific, and Central and South America.\textsuperscript{143}

PPPs have traditionally focused on the construction of physical infrastructure, with accompanying private investment in service delivery. Recently, PPPs have expanded their scope to include developing non-tangible infrastructure and providing public services without infrastructure development.\textsuperscript{144} Although not directly related to agricultural finance, it is important to note that many of the areas being considered within this paper lack both legal regulation and physical and non-tangible infrastructures to facilitate growth in the agricultural community. As such, PPPs for investment in physical and non-tangible infrastructure might be of great benefit to farmers.

Although the full parameters of improving investment through the use of a regulated PPP is well beyond the scope of this paper, the importance to agricultural infrastructure is readily apparent as the main beneficiary of PPPs is often the transportation infrastructure. Moreover, PPPs are considered an economic and legal tool essential to the boosting economic development and governance.\textsuperscript{145} Noted authority Bernard Nyembo argues that:

\begin{quote}
A robust international legal entity will be the safeguard and the cornerstone for PPPs, the engine for financing projects. Building a Model Convention for PPPs will make a big difference . . . . Time has come to put together a team of doers, facilitators, and governments for establishing a new era of PPPs.\textsuperscript{146}
\end{quote}


Agricultural industry is not the main target of these initiatives, but they will be large beneficiaries of a better public infrastructure in regions sorely in need of such investment. The development of a model law in this area will greatly help low-income countries adopt sound regulations for PPPs, which will protect and assist farmers.

IV. SOME SUGGESTED SOLUTIONS

International organizations often create overlapping legal texts that sometimes fail to gather support in the international community. Moreover, because the projects often have a single focus, stakeholders are sometimes forgotten and some areas of legal consideration are overlooked. As highlighted by noted authority Heywood Fleisig: “Disturbingly, many projects implement financial reforms that do not address the economic fundamentals of secured lending.”\textsuperscript{147} The absence of including secured lending within the planning of financial reforms, even if secured lending is a distant dream, is a troubling reality of many financial reform efforts. He goes on to note, “many reforms have had to be redone, sometimes more than once.”\textsuperscript{148} The need to repeat basic reform efforts (and drafting for that matter) is a serious issue in light of the pressing need to assist SME farmers in order to reduce food insecurity. The involvement of SME agricultural entities, in many regions of the world, will only occur if the industry has improved resources, including improved access to finance. There simply is not enough time to repeat the process, and solutions must be implemented soon if any real impact on food production is to be had. This section highlights various ways policymakers can increase their reform efforts’ chances of success.

A. Coordination of Policies Must Become the Focus

Coordination of policies intersecting both the financial and agriculture sectors is critical to facilitating access to finance for farmers and agricultural SMEs. Unfortunately, as can be seen from the various and numerous legal texts described in this paper, coordination among the texts does not exist, and these texts do not even account for the regional efforts underway. Significant and vast differences exist between domestic, regional and international texts. Taken together, few of the international texts fully accommodate the needs of the agricultural sector. There are various gaps in coverage, specifically in the areas of secured transactions, contract-farming, leasing, warehouse receipts, land tenure and PPPs. The absence of these texts are concerning as the financial needs of SME farmers and agricultural

\textsuperscript{147} Fleisig, supra note 96.
\textsuperscript{148} Id.
SMEs are not being met, which likely results in these entities not becoming part of the overall solution to the food shortage issue.

Fortunately, some progress is being made in key areas. As described above, land tenure, land registries and contract farming are all currently drawing the attention of various international organizations. Equally important are the ongoing efforts to create a collateral registry. As highlighted by former World Bank economist Thorsten Beck, “[c]redit registries are especially important for SMEs as their creditworthiness is harder to evaluate and they have less visibility and transparency relative to large enterprises.”149 Without a doubt each of these initiatives, if completed with at least one eye toward agricultural entities, will impact the ability of agricultural SMEs to access a wider area of finance. However, these initiatives are in the early stages of development and are therefore far from impacting access to finance. Moreover, because the texts are in the very early stages of the drafting process, no one can accurately predict the success of the final instrument.

Unfortunately, the 4th Protocol of the Cape Town Convention governing secured transactions in agricultural equipment is a dream that is far from completion as the approval to proceed in the endeavor is yet to be confirmed. As a result, there is no secured transaction guide specifically tailored to agriculture.150 Also unfortunate is the fact that the 4th Protocol will likely not improve the plight of SME agricultural needs in terms of equipment financing. While some commentators argue that farmers need the 4th Protocol, it is the equipment industry making these claims. As discussed in Part I, SME agricultural providers—many of whom are located in low-income or transitioning countries—lack basic fundamental legal protections, such as the existence and enforcement of basic contract rights. Agricultural entities in these areas will not benefit anytime soon from creation of a secured transactions regime limited to equipment. While the 4th Protocol will likely benefit some now, its time to benefit agricultural SMEs is in the very distant future. The need for farmers to receive financing for the acquisition of equipment rests in the hands of those drafting leasing texts. As discussed above, no leasing texts truly considers the issues associated with agricultural equipment, especially in the case of SME lessees. Those legal texts that currently exist have been widely criticized by the international commercial community. As a result, it is


150 The existing UNCITRAL Legislative Guide on Secured Transactions is lacking in robust agricultural coverage. It does, however, cover equipment as a finance device, but it is not specific (and does not seem to envision) agricultural finance. *See UNCITRAL Legislative Guide, supra* note 105.
unsurprising that few commentators would support widespread use of these texts within the agricultural sector.

In addition, the absence of local banking, the slow-moving progress being made in terms of regulating mobile banking and payment, and the non-existent electronic transferable records legislation, will continue to cause delays in SME agricultural growth. SME agricultural industries, especially those located in rural environments, must have access to these services via electronic, likely mobile, technology. As was discussed previously, the absence of local banking greatly reduces local industries, such as agriculture, from obtaining finance. Moreover, agricultural finance often demands exceptional knowledge of local agricultural needs and financing alternatives developed based on local demand. The absence of local banking, especially the absence of electronic document submission and payment, will continue to limit the local agricultural industry from growing.

Finally, the absence of a basic model law in relation to warehouse receipts is a tragic and important omission for the activities of international organizations. Warehouse receipts are essential elements in agricultural finance. As previously discussed, agricultural industry can use such documents both as a receipt and a way to mitigate risk by passing the paper as a collateral device and sales document. The absence of the ability to sell the document, without physical delivery of the goods, is a serious limitation within a commodities industry, such as agriculture. While the inability to produce electronic warehouse receipts is a limitation, the absence of legal recognition of warehouse receipts makes the local agricultural industry greatly restricted in its participation as a global sale or exchange facility.

As can be quickly surmised from the list of needs and criticisms, even if all of these efforts succeed, only one, the 4th Protocol, focuses on farmers in a coordinated manner. In the majority of the texts discussed, farmers are an important, but not main focus. Because agricultural related issues could fall within these texts, the non-gap enthusiasts are able to argue that gaps do not exist and thus, no resources should be allocated to fix problems that do not exist. Of course, this is an argument that must fail as these texts do not address agricultural needs and have generally failed to gather the support of the wider international community. Thus, the gap exists, especially in the case of the agricultural industry, despite the existence of a legal text covering a much wider legal area. However, in institutions working with limited budgets and time constraints, these arguments are allowed to shift focus away from the fundamental need to promulgate a useful, agricultural sensitive text that addresses some of the most basic needs of the agricultural sector.
Accordingly, some scholars argue that the appointment of a single coordinating body as the advocate for agricultural finance would better optimize policies that target farming as an economic enterprise. This high-level body can also reconcile and harmonize policies focused on objectives related to rural development, social support and food security that are aligned with, but not necessarily the same as, policies supporting agricultural finance. Even in the absence of such a coordinating body, coordination is necessary between the various stakeholders and drafting bodies. The basic problem is that different governments and international organizations have differing interests and perspectives concerning agricultural finance. This is particularly true with respect to macroeconomic policies, agriculture sector policies and financial sector policies. As explained by noted U.N. author Elizabeth Coffey:

All three policy areas have their own impact on the effective provision of financial services. Generation of an effective agricultural and rural finance policy depends on the definition of a clear overall rural finance policy framework and strategy. Tensions and contradictions do occur between each of these policy areas, which need to be debated and addressed through effective and continuous policy dialogue. Often, however, an effective policy dialogue platform does not (yet) exist . . . with a lack of confidence between the public and private sector.151

The absence of a coordinated agricultural finance policy think tank—or similar institution—leaves agricultural SMEs without a policy that will foster better access to finance. Without this coordination, agricultural SMEs will be left to struggle with the limitations presented in Parts I and II. Frankly, in the long-run, this means that the global food crisis will need to find alternatives to the use of self-reliant and “community/regional” food providers in key areas that could have effectively served to greatly reduce the local food shortage in transitioning and low-income countries.

B. Soft Law Efforts Must be Increased by International Organizations

International soft law, particularly in the form of model laws and legislative guides, may assist low-income countries to develop the necessary legal and regulatory frameworks for promoting SME agricultural

financing. International soft law refers to the legal norms, principles, codes of conduct and transactional rules that are recognized in either formal or informal multilateral agreements. The use of soft law as a harmonizing device is more important in financial reform, especially within the agricultural sector. Farming, like so many other institutions, is necessarily local. Local customs, local weather and climate issues—coupled with the growing recognition of the local nature of finance—leads to the need to create legal texts that allow for local variations. As esteemed European Bank for the Reconstruction and Development lawyer and economist Frederique Dahan and John Simpson emphasize, the role of those providing technical assistance and support to transition countries is to “assist, not to dictate or impose.” Soft law can accommodate local variances, as the legal text is there to provide guidance instead of hard and fast rules.

Frederique Dahan and John Simpson offer their advice to assist in local reform success: “(1) The drafting should be done by local lawyers.”
“(2) The temptation to import foreign law concepts should be resisted.”
“(3) Some understanding of local legal tradition is essential.”
“(4) The approach should be dispassionate and impartial.”

These stated guidelines can be greatly assisted by the creation of soft law documents promulgated by international legal organizations. However, none of these goals suggest that an international implementation of hard law will lead to success. Success depends upon a local component of drafting and local support. In fact, many reform efforts require advocates to overcome long standing cultural hesitations. In these instances, local involvement is essential and this especially true with the agricultural sector in low-income countries.

There are several international organizations that have developed legal texts in the form of conventions, legislative guides and model laws

153 Frederique Dahan & John Simpson, Legal Efficiency of Secured Transactions Reform, in SECURED TRANSACTIONS REFORM AND ACCESS TO CREDIT 127 (Frederique Dahan & John Simpson eds., 2008).
154 Id. at 128.
155 Id. at 128.
156 Id. at 128.
157 Id. at 128.
158 For example, Gerald Corrigan when speaking in relation to Latin America and the Caribbean banking problems notes: “the problems associated with the credit life cycle are severely complicated by the historic lack of a credit culture that firmly establishes in law, tradition, and custom, the relationships, duties and responsibilities between creditors and debtors.” Fleisig, supra note 96, at 103.
that can be used, address many of the needs of agricultural financing in low-income countries. “A model law or legislative guide is an example of a text which is drafted to harmonize domestic law, while a convention is an international instrument which is adopted by the States for the unification of the law at an international level.”159 Model laws and legislative guides are more appropriate when States “wish or need to make adjustments to the uniform text to accommodate local requirements that vary from system to system, or where strict uniformity is not necessary.”160 The common idea behind all of these texts is that once the supplied laws are incorporated into domestic legal systems, existing legal frameworks will be improved and economic development will occur.161

Unfortunately, with limited exceptions discussed above, the agricultural sector is often not considered an autonomous institution needing attention and specialized legal text. Instead, if the sector is considered at all, it is considered within the overall needs of a region and is treated as just another SME business entity. The impact of not including an important stakeholder within reform efforts should be considered a major barrier to the overall success of the reform project. As the Deputy Director General for the Regional Policy in the European Commission has noted, several factors positively influenced the reform of Slovak secured transactions reform process.162 The Deputy Director General further highlighted that the reform was led “by a very effective team that invested heavily in consensus building for the reform and effectively managed the diverse stakeholders.”163 Farmers are significant stakeholders that must be considered essential elements in any further reform efforts. In fact, agricultural SMEs should be afforded laws that are specific to their distinctive financial needs. The international community can and should help with this process, as the institutions discussed above are in the best position to provide resources and support.

163 Id.
C. Enforcing Legal Rights Should be a Prominent Element of Reform

As highlighted by the World Justice Project discussed within Part I, many systems of the greatest need suffer from the largest access-to-justice issues. The IFC’s Doing Business Report is intended to provide objective measures of business regulations for local firms. One factor, enforcing contracts, assesses the efficiency of the judicial system by following the evolution of a commercial sale dispute over the quality of goods and tracking the time, cost and number of procedures involved from the moment the plaintiff files the lawsuit until payment is received. Although this is not agriculture specific, it highlights the plight of an individual, including a farmer, lender, lessor or lessee, in enforcing her rights within a court of law.

**Enforcement Timeframes**

<table>
<thead>
<tr>
<th>Region</th>
<th>Time (days)</th>
<th>Cost (% of claim)</th>
</tr>
</thead>
<tbody>
<tr>
<td>East Asia &amp; Pacific</td>
<td>522</td>
<td>48.6</td>
</tr>
<tr>
<td>Eastern Europe &amp; Central Asia</td>
<td>414</td>
<td>25.8</td>
</tr>
<tr>
<td>Latin America &amp; Caribbean</td>
<td>727</td>
<td>30.8</td>
</tr>
<tr>
<td>Middle East &amp; North Africa</td>
<td>652</td>
<td>23.9</td>
</tr>
<tr>
<td>OECD high income</td>
<td>510</td>
<td>20.1</td>
</tr>
<tr>
<td>South Asia</td>
<td>1,075</td>
<td>27.2</td>
</tr>
<tr>
<td>Sub-Saharan Africa</td>
<td>649</td>
<td>50.1</td>
</tr>
<tr>
<td>United States</td>
<td>370</td>
<td>14.4</td>
</tr>
</tbody>
</table>

As is immediately apparent from the timetables contained in the figure above, the length of time to enforce contracts with the assistance of judicial process is significant. Even the shortest time period listed, 370 days, is almost always more than one season, regardless of the crop in question. Some would immediately point to the absence of self-help remedies, available in certain situations in the United States, and other

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164 See World Justice Project, supra note 24.
166 *Id.*
167 *Id.*
168 For example, under U.C.C. art. 9 (involving secured transactions).
alternative justice means to reduce these timeframes. However, alternatives to traditional justice are often too far removed from rural populations, and those that do exist, can be fraught with corruption, local influence and inadequate due process protections. As highlighted by Professor of Finance Florencio Lopez-de-Silanes: “[l]egal reform in the area of creditor rights and collateral law need to take into account the poor enforcement environment and be complemented with judicial reform itself.”169 This statement is as true for agricultural SME finance reform as it is for financial legal reform in general. The absence of effective enforcement of any contractual right, not merely financial rights, leads to difficulties for all stakeholders, as can be gleaned from the above statistics. And of course, enforcement must be both effective and swift.170 It is not enough to promise enforcement at some distant time. As such, legal texts are but one small, yet important, portion of the overall reform efforts. Professor Lopez-de-Silanes goes on to highlight:

To foster credit access in developing countries, reforms must take into account two things: (1) enforcement of legal rules is deeply connected with the rules themselves; and (2) since institutional reform is slow and complicated, complementary market-based mechanisms should be adopted to help create the necessary pressure for more reform to take place.171

This article cannot fully explore such an important, but lengthy and complicated issue. While it is clearly the case that legal reforms are needed to improve SME farmers access to finance, one has to consider the overall justice system. Law is ineffective without enforcement. The absence of enforcement of these legal rights—free from corruption and retaliatory consequence—means that legal text is often not worth the paper it is scribed upon.

V. CONCLUSION

Agricultural SMEs are essential stakeholders in reducing food insecurity. Without the necessary legal protections, SME farmers will continue to exist on little more than subsistence farming and will not be able to help fulfill global food needs. Current legal texts promulgated by international organizations are beginning to make inroads into the financial

169 Florencio Lopez-de-Silanes, *Turning the Key to Credit: Credit Access and Credit Institutions*, in *SECURED TRANSACTIONS REFORM AND ACCESS TO CREDIT* 28 (Frederique Dahan & John Simpson eds., 2008).
170 See Beck, *supra* note 149, at 65.
reform areas. However, agricultural SMEs are often overlooked or are only tangentially contained within the overall reform efforts. Agricultural SMEs have a somewhat distinctive set of needs that demand focused attention to improve finance. Unfortunately, only a few legal initiatives are underway to improve this situation. The development of various model laws and other soft law texts are essential to improve financing for agricultural SMEs, thereby increasing their ability to participate in efforts to reduce the global food scarcity.
Appendix A: Low-Income Economies

<table>
<thead>
<tr>
<th>Afghanistan</th>
<th>Kyrgyz Republic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bangladesh</td>
<td>Liberia</td>
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<tr>
<td>Benin</td>
<td>Madagascar</td>
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<td>Burkina Faso</td>
<td>Malawi</td>
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<td>Burundi</td>
<td>Mali</td>
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<td>Cambodia</td>
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<td>Nepal</td>
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<tr>
<td>Comoros</td>
<td>Niger</td>
</tr>
<tr>
<td>Congo, Dem. Rep</td>
<td>Rwanda</td>
</tr>
<tr>
<td>Eritrea</td>
<td>Sierra Leone</td>
</tr>
<tr>
<td>Ethiopia</td>
<td>Somalia</td>
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<tr>
<td>Gambia, The</td>
<td>South Sudan</td>
</tr>
<tr>
<td>Guinea</td>
<td>Tajikistan</td>
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<tr>
<td>Guinea-Bisau</td>
<td>Tanzania</td>
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<tr>
<td>Haiti</td>
<td>Togo</td>
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<tr>
<td>Kenya</td>
<td>Uganda</td>
</tr>
<tr>
<td>Korea, Dem Rep.</td>
<td>Zimbabwe</td>
</tr>
</tbody>
</table>

172 How We Classify Countries, supra note 4.