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When Baby Steps Just Won't Work: Small Farmers Are Our Best Hope Reducing Food Insecurity and We Are Not Doing Enough

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When Baby Steps Just Won't Work: Small Farmers Are Our Best Hope Reducing Food Insecurity and We Are Not Doing Enough

*Anjanette H. Raymond and Abbey Stemler**

Abstract: The concept of “baby steps” is well-known among psychologists and movie buffs alike. In the classic movie “What About Bob,” Dr. Leo Marvin (played by Richard Dreyfuss) gives to Bob (Bill Murray), a highly dependent and worried individual, a copy of his book Baby Steps. Dr. Marvin explains, “It means setting small, reasonable goals for yourself. One day at a time, one tiny step at a time—doable, accomplishable goals.” For many, the concept of “baby steps,” methodically working on simple, constrained pieces of a problem, is a useful approach in solving complex and difficult problems. Unfortunately, accomplishing large goals through small increments can take a considerable amount of time and coordination. And, in the case of solving world hunger, time is up. Prior attempts to address the issue of hunger have been based on baby steps, and now we must abandon such incremental approaches and focus on large-scale changes. Otherwise, the world will soon see a food crisis like never before. The first part of the paper asserts that increased access to financing is needed for smallholder farmers to help boost farm productivity and reduce food scarcity. The second part, describes a new protocol to an existing convention, the Cape Town Convention (defined below), that some argue will benefit agriculture financing. The paper concludes by considering the actual impact the new protocol would have on small farmers’ ability to reduce food and asserts that while the protocol might end up being a successful one, it is still just a baby step toward the stated goal of eliminating world hunger.

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TABLE OF CONTENTS

I. Food Insecurity and the Role of the Small Agricultural Enterprise.....	337
A. The Power of Smallholder Farms.....	339
B. The Need for Innovative Financing for Smallholder Farms.....	342
C. The Importance of Collateral.....	345
II. Improving Access to Finance Through Collateral.....	348
A. History and Overview of the Cape Town Convention	348
B. The Importance and Impact of the First Protocol	352
C. The Newest Protocols	354
1. The Rail Protocol	354
2. The Space Protocol	357
III. Extending the Convention into Agricultural Equipment.....	360
A. The Research	360
B. The Growing Chorus of Support	362
C. An Extension Too Far.....	363
1. Initial Concerns	363
(i) The Need for a Mining, Agricultural, and Construction Equipment Protocol.....	364
(ii) Value of MAC Equipment as Collateral	365
(iii) Appropriateness.....	366
2. Additional Concerns	369
(i) Benefits Exclusively for Large Farms	369
(ii) The Failure to Include Small Farming Equipment.....	370
(iii) The Lack of Time	371
(iv) Baby Steps Will Not Work.....	372
IV. Conclusion	373

The Journey of A Thousand Miles Begins With A Single Step
— Tao Te Ching

I. FOOD INSECURITY AND THE ROLE OF THE SMALL
AGRICULTURAL ENTERPRISE

Since 2000, the demand for agricultural commodities has increasingly outstripped supply, leading to high food prices and food insecurity¹ in low-income countries.² The number of undernourished individuals in the world is currently estimated at 925 million, and the future does not look any brighter.³ 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.⁴ Most of the growth in food demand will come from low-income countries. There are approximately 500 million smallholders on farms of less than two hectares worldwide.⁵ In Asia and Sub-Saharan Africa specifically, these farmers produce about eighty percent of the food consumed.⁶ Furthermore, seventy-five percent of the world's poor and undernourished people are located in rural areas and depend on agriculture directly or indirectly for their livelihoods.⁷ What is often unnoticed is that all of these countries also have the greatest untapped production capacity.⁸

There have been many signals by the international community of a political willingness to address the problems of world poverty and hunger,

¹ Abbey Stemler and Anjanette Raymond, *Promoting Investment in Agricultural Production: Increasing Legal Tools for Small to Medium Farmers*, 8.2 ENTREPRENEURIAL.. 8.2 BUS. L. J. 2812, 282 (2013).

² 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. See *How We Classify Countries*, WORLD BANK, <http://data.worldbank.org/about/country-classifications> (last visited Oct. 29, 2013); see *infra* app. A.

³ See Food and Agricultural Organization of the United Nations, *925 Million in Chronic Hunger Worldwide*, FOOD & AGRIC. ORG. OF THE U.N., available at <http://www.fao.org/news/story/en/item/45210/icode/> (last visited Feb. 5, 2014).

⁴ See FOOD AND AGRICULTURAL ORGANIZATION OF THE UNITED NATIONS, WORLD SUMMIT ON FOOD SEC., FEEDING THE WORLD, ERADICATING HUNGER 4-5 (2009), available at http://www.fao.org/fileadmin/templates/wsfs/Summit/WSFS_Issues_papers/WSFS_Background_paper_Feeding_the_world.pdf.

⁵ See Kanayo F. Nwanze, *Viewpoint: Smallholders Can Feed the World*, INT'L FUND FOR AGRIC. DEV (2011), available at <http://www.ifad.org/pub/viewpoint/smallholder.pdf>.

⁶ See *id.*

⁷ See LUCIA WEGNER & GINE ZWART, WHO WILL FEED THE WORLD?, OXFAM 12 (2011), available at <http://www.oxfam.org/sites/www.oxfam.org/files/who-will-feed-the-world-rr-260411-en.pdf>.

⁸ See LEADING GROUP FOOD SECURITY TASK FORCE, INNOVATIVE FINANCING FOR AGRICULTURE, FOOD SECURITY AND NUTRITION 12 (2012), available at http://www.leadinggroup.org/IMG/pdf/Innovative_financing_for_agriculture_food_security_and_nutrition_dec_2012_english.pdf.

such as the setting of the U.N. Millennium Development Goal, to halve the proportion of people who suffer from extreme poverty and hunger; the Poverty Reduction Strategy Papers Process, requiring countries receiving International Monetary Fund and World Bank support to develop poverty-focused strategies; and the Heavily Indebted Poor Country Initiative, providing debt relief to extremely poor countries so they can spend resources on health, education, and other social services.⁹ Agricultural promotion in general is expected to be especially effective in reducing food insecurity¹⁰ and poverty in four ways: (1) by raising farm incomes and thereby benefiting the many farmers who live in poverty; (2) by creating employment on farms, given that agriculture tends to employ more workers per unit of output than other sectors; (3) by stimulating the rural nonfarm economy through linkages in both production and consumption; and (4) by pushing down the prices of staple foods to the benefit of the many poor who are net food buyers, even in rural areas.¹¹

While interest in agriculture is currently at a high, enthusiasm for smallholder development is mixed.¹² Some scholars believe that smallholder farms are not viable options for reducing food insecurity because they cannot compete with high-volume, large farms that are more mechanized and capital-rich.¹³ It is true that smallholder farming does have its significant challenges—from the liberalization of international trade and falling prices for agricultural commodities on world markets, to the vigorous entry of supermarket chains and their exacting demands for quality, consistency, and timeliness from potential suppliers. In addition, farmers also struggle with lack of financing, access to basic inputs, and an infrastructure to sell agricultural products at the most opportune time and location.¹⁴ However, as discussed in Subsection A, smallholder farms have proved remarkably

⁹ See FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS, FINANCING AGRICULTURE AND RURAL DEVELOPMENT IN AFRICA: ISSUES, CONSTRAINTS AND PERSPECTIVES 2 (2004), available at <ftp://ftp.fao.org/docrep/fao/meeting/012/k0677e.pdf>.

¹⁰ The internationally recognized definition of food security from the World Food Summit in 1996 states that, “Food security exists when all people at all times, have physical and economic access to sufficient safe, and nutritious food that meets their dietary needs and food preferences for an active and healthy life.” FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS, ROME DECLARATION ON WORLD FOOD SECURITY (1996), available at <http://www.fao.org/docrep/003/w3613e/w3613e00.HTM>; LEADING GROUP FOOD SECURITY TASK FORCE, *supra* note 12.

¹¹ See ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT, *Agriculture, in PROMOTING PRO-POOR GROWTH* 135, 144–46 (2006), available at <http://www.oecd.org/dac/povertyreduction/37922155.pdf>.

¹² Wiggins et al., *supra* note 3, at 1342.

¹³ See Paul Collier & Stefan Dercon, *African Agriculture in 50 Years: Smallholders in a Rapidly Changing World?*, FOOD & AGRIC. ORG. OF THE U.N. (2009), available at <http://www.fao.org/3/ak983e.pdf>. See generally Caroline Ashley & Simon Maxwell, *Rethinking Rural Development*, 19 DEV. POL’Y REV. 395 (2001).

¹⁴ See Peter Hazell, Colin Poulton, Steve Wiggins & Andrew Dorward, *The Future of Small Farms: Trajectories and Policy Priorities*, 38 WORLD DEV. 1349, 1349 (2010).

resilient. Indeed, the number of small farms in the developing world appears to be rising rather than falling, although average farm size continues to decline in large parts of the developing world.¹⁵ Subsection B discusses how improved access to financing can strengthen smallholder farmers, and Subsection C specifically addresses the importance of collateral.

A. The Power of Smallholder Farms

Interest in small farms has waxed and waned throughout time.¹⁶ In the international community in the 1950s, agriculture was not considered central to economic growth and development; it was viewed as a low productivity industry, and at times simply a labor reserve.¹⁷ Experiences of industrialization in the 1950s and 1960s demonstrated, however, that manufacturing could not provide enough jobs for underemployed rural labor and, not surprisingly, that agriculture was essential for producing affordable food supplies necessary for industry growth.¹⁸ This prompted a reassessment of the role of agriculture; far from being a follower of industrialization, Professors Bruce F. Johnston and John W. Mellor proposed a central role for agriculture in development, based on potential functions of agriculture as a supplier of food and raw materials, a source of capital, surplus labor, and foreign exchange, and as a market for produce of other sectors.¹⁹

The early 1960s saw the emergence of high-yielding, hybrid varieties of cereals that would form the technical core of the “green revolution.”²⁰ The practices of fertilization, water control, and crop protection needed to make use of these new seeds were, at least in theory, scale neutral and thus eminently suitable for small farms in the sense that the seeds did not require advanced equipment or expertise. In their paper “Redistribution with Growth,” scholars Cherny, Ahluwalia, Bell, Duloy, and Jolly proposed that investing in small-scale enterprises of poor people would raise rates of economic growth, not depress them.²¹ Donors embraced these ideas, most no-

¹⁵ See *id.* at 1352.

¹⁶ See Wiggins et al., *supra* note 3, at 1351.

¹⁷ See *id.*

¹⁸ See *id.*

¹⁹ See generally Bruce F. Johnston & John W. Mellor, *The Role of Agriculture in Economic Development*, 51 AM. ECON. REV. 566 (1961).

²⁰ See STEVE WIGGINS, JOHN FARRINGTON, GILES HENLEY, NATASHA GRIST & ANNA LOCKE, *AGRICULTURAL DEVELOPMENT POLICY: A CONTEMPORARY AGENDA 2* (2013), available at <http://www.giz.de/expertise/downloads/giz2013-en-odi-agricultural-development-policy-contemporary-agenda.pdf>. The Green Revolution was a successful agriculture-led poverty reduction program. Dr. William Gaud coined the term “Green Revolution” in 1968 to refer to improving crop production through enhanced productivity by enabling plants to utilize sunlight, irrigation water, and nutrients more effectively.

²¹ See generally HOLLIS CHENERY, JOHN H. DULOY, AND RICHARD JOLLY, *REDISTRIBUTION WITH*

tably the World Bank, whose President, Robert McNamara, declared in Nairobi in 1973 that increasing the productivity of small-scale agriculture was “essential” to eradicating absolute poverty by the end of the century.²²

The focus on small farms continued through the 1970s because leaders were concerned that rapid population growth would outstrip increases in agricultural production, causing a food shortage of epic proportion.²³ As scholars Wiggins, Kirsten, and Llambí write:

Alarmed leaders redoubled efforts to develop agriculture, most notably through investing in the “green revolution.” Governments, above all in Asia, funded agricultural research and extension to promote the new high-yielding varieties of maize, rice, and wheat. They complemented this by building roads and irrigation works, while providing inputs on credit and guaranteeing to buy surpluses from farmers. Internationally, budgets for the agricultural research centers to generate the improved seeds and practices that were the agronomic core of the revolution were greatly increased.²⁴

In the 1980s, macroeconomic stabilization led to a subdued interest in agriculture, and interest in agriculture further waned in the 1990s because the world’s attention turned to the environment, gender, health, and education.²⁵ However, since the turn of the century, interest in agriculture has once again piqued as world food prices have risen to unprecedented levels and the levels of food insecurity have become devastatingly high.²⁶ Nevertheless, the enthusiasm for smallholder farms, as opposed to large farms, is uneven.

Today’s policymakers see large farms as modern, technically advanced, and efficient, a view reinforced by large-scale farmers who are often better organized to lobby for public support. Lobbying efforts by large farms have also helped these farms access subsidized credit, insure their output, and build up infrastructure, among other benefits.²⁷ Furthermore, most states have chosen to take a narrower role in agricultural development, leaving private actors in the market to provide input, services, credit, and marketing, which have left many smallholders at a further disadvantage

GROWTH (1974).

²² Robert S. McNamara, President, World Bank Group, The Nairobi Speech, Address to the Board of Governors (Sept. 24, 1973).

²³ See Wiggins et al., *supra* note 3, at 1342.

²⁴ *Id.*

²⁵ See CARL EICHER, FLASHBACK: FIFTY YEARS OF DONOR AID TO AFRICAN AGRICULTURE 15 (2003), available at <http://www.ifpri.org/sites/default/files/pubs/events/conferences/2003/120103/papers/paper16.pdf>.

²⁶ See *Food: Overview*, UNITED NATIONS, <http://www.un.org/en/globalissues/food/> (last visited Feb. 8, 2014). In addition, there are other signals that the focus has shifted back to agriculture such as the setting of the U.N. Development Goals and the search for what has become known as “pro-poor” growth, meaning economic growth that also reduces poverty. See generally FOOD AND AGRICULTURAL ORGANIZATION OF THE UNITED NATIONS, *supra* note 13, at 2.

²⁷ See Wiggins et al., *supra* note 3, at 43.

since they face higher costs in the form of interest rates and down payments in private financial markets than larger, more sophisticated operators.²⁸

This policy environment that is conducive to investments in commercial farming operations does offer some advantages over efforts aimed at engaging millions of dispersed small-scale farmers.²⁹ First, larger farms are in a better position to feed rapidly expanding cities than smallholders with little or no surplus to sell.³⁰ Second, large farms are in a better position than smallholders to adopt and adapt technologies to local contexts, thereby allowing them to quickly incorporate new technologies into their farm systems to maintain yield growth over time.³¹ Third, decades of effort to promote smallholder development and food security in low-income countries, especially those in Africa, have yielded slow progress.³² Indeed, over the last forty years, staple food yields on the African continent have remained stagnant while the average farm size has declined.³³ These views have led a small but growing group, including many African policymakers, to argue that investment in small-scale farmers is simply not a viable option for achieving the sorts of structural transformations and food productivity gains low-income countries need to address entrenched issues of poverty.³⁴

Despite the potential benefits of large farms, the case for setting small farms at the center of agricultural development can also be made on several grounds, including efficiency, job creation, and local stimulus. Regarding efficiency, studies have often reported an “inverse relationship” between farm size and production per unit of land, meaning larger farms yield lower gross and net returns per hectare of land per year than smaller farms.³⁵ This relationship may be explained by the difference between hired labor, which requires supervision and family help. The household farm is more motivated to self-regulate and exploit its own manpower and land to the fullest extent; thereby, making the costs associated with production significantly lower than larger farms.³⁶

²⁸ See *id.* at 1344.

²⁹ See Nicholas J. Sitko & T.S. Jayne, *The Rising Class of Emergent Farmers: An Effective Model for Achieving Agricultural Growth and Poverty Reduction in Africa 2* (Indaba Agric. Policy Research Inst., Working Paper No. 69, 2012), available at <http://fsg.afre.msu.edu/zambia/wp69.pdf>.

³⁰ See *id.*

³¹ See *id.*

³² See *id.*

³³ See T.S. Jayne, Jordan Chamberlin & Milu Muyanga, *Emerging Land Issues in African Agriculture: Implication for Food Security and Poverty Reduction Strategies*, CENTER FOR FOOD SEC. AND THE ENV'T (2012), available at http://fse.fsi.stanford.edu/sites/default/files/Jayne_1_12_12_final.pdf

³⁴ See *id.* at 2.

³⁵ See Michael R. Carter, *Identification of the Inverse Relationship between Farm Size and Productivity: An Empirical Analysis of Peasant Agricultural Production*, 36 OXFORD ECON. PAPERS 131, 131 (1984).

³⁶ See Hans P Binswanger & Mark R. Rosenzweig, *Behavioural and Material Determinants of Production Relations in Agriculture*, 22 J. DEV. STUDIES 503, 519–20 (1986).

As for job creation, small farms typically create more jobs than large farms because they use labor from both their own households and their equally neighbors.³⁷ Lastly, compared to large farms, small farms “have more favorable expenditure patterns for promoting growth of the local non-farm economy, including rural towns.”³⁸ Small farms spend higher shares of their income on local products than large farms, thereby creating additional demand for the many labor-intensive goods and services produced in local villages and towns.³⁹ The build-up of purchasing power among millions of farmers, who subsequently recycle their money into first the local and later the broader economy, creates a virtuous cycle “in which urban and rural labor forces provide markets for each other.”⁴⁰ “Over time, as demand for non-farm products and services rise, the labor force responds by shifting from farm to non-farm sectors,” thereby raising the number of employment opportunities for and incomes of the broader population.⁴¹

According to Hazell, “few countries have ever achieved rapid economic growth at the early stages of development without a substantial growth in agriculture.”⁴² For example, Vietnam has gone from being a food-deficit country to a major food exporter, and it is now the second largest rice exporter in the world. It achieved this in part through development of its smallholder farming sector, and as a result, in 2007 the poverty rate in Vietnam fell below 15%, compared with 58% in 1979.⁴³ With the huge numbers of small farms in low-income countries, it seems obvious that small farms are a place to start to help alleviate poverty and promote growth.

B. The Need for Innovative Financing for Smallholder Farms

For the purposes of reducing food insecurity, smallholder farms must get bigger and better, but as stated by Professors Valdes and Foster, the goal “is not to maintain millions of small farmers but to eliminate poverty, the goal should be to achieve dynamic overall economic growth (enhanced by and increasing agricultural growth) that also offers better non-farm income opportunities to all rural families, perhaps even including through migration.”⁴⁴ Smallholder farms need a jolt, a

³⁷ Financial development, economic growth and poverty reduction have long been linked. *See e.g.* Thorsten Beck, *Policy Choices for an Efficient and Inclusive Financial System*, in SECURED TRANSACTIONS REFORM AND ACCESS TO CREDIT 54 (Frederique Dahan & John Simpson eds., 2008).

³⁸ Hazell et al., *supra* note 18, at 1352.

³⁹ *See id.*

⁴⁰ Sitko & Jayne, *supra* note 33, at 1.

⁴¹ *Id.*

⁴² Hazell et al., *supra* note 18, at 1349.

⁴³ *See Food Prices: Smallholder Farmers Can Be Part of the Solution*, THE INT’L FUND FOR AGRIC. DEV., <http://www.ifad.org/operations/food/farmer.htm> (last visited Sept. 9, 2015).

⁴⁴ Alberto Valdes & William Foster, *Reflections on the Role of Agriculture in Pro-Poor Growth*, 38

stimulus, to help them break free from the bonds of subsistence farming⁴⁵ and move to more productive activities, farm and non-farm alike. One of the key ingredients for that “jolt” is financing.

Smallholder farms need financing in order to cover production costs such as: “(seasonal) labor, seeds, fertilizers, herbicides, pesticides, packaging materials, veterinarian services, medicines, water, electricity, fuels, and transport.”⁴⁶ Furthermore, smallholder farming is characterized by periodic incomes after harvest, while production costs (and private expenses) are incurred throughout the season. “The right financing at the right time means greater efficiency, improved product quality and increased incomes.”⁴⁷ Lastly, access to credit and savings products is essential to optimize the agricultural and financial cycles (e.g., purchase inputs when these are cheap and sell produce when it is expensive). Poverty often forces farmers to sell crops when the time is not right—they have no ability to store their crops; therefore, they sell when harvested, usually the time when supply is high and prices are low. Without access to finance (savings and credit), farmers remain in low-investment/low-productivity agricultural operations.

For the past twenty years, there has been a steep decline in the availability of financial resources for agriculture and rural development.⁴⁸ 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.⁴⁹ 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.⁵⁰ Se-

WORLD DEV. 1362, 1363 (2010).

⁴⁵ Smallholder farms make up approximately two-thirds of the world’s 3 billion rural residents, the majority of people living in absolute poverty, and half of the world’s undernourished people. International Food Policy Research Institute, *The Future of Small Farms: Proceedings of a Research Workshop*, Wye, UK, (2005).

⁴⁶ Reuben Jessop, Boubacar Diallo, Marjan Duursma, Abdallah Mallek, Job Harms & Bert van Manen, *Creating Access to Agricultural Finance: Based on a Horizontal Study of Cambodia, Mali, Senegal, Tanzania, Thailand and Tunisia*, 14 A SAVOIR 18 (2012), available at <http://www.afd.fr/webdav/shared/PUBLICATIONS/RECHERCHE/Scientifiques/A-savoir/14-VA-A-Savoir.pdf>.

⁴⁷ *Id.*

⁴⁸ 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.” Gustavo Anriquez & Kostas Stamoulis, *Rural Development and Poverty Reduction: Is Agriculture Still the Key?*, 4 J. AGRIC. & DEV. ECON. 5, 6 (2007).

⁴⁹ See Jonathan Campaigne & Tom Rausch, *Bundling Development Services with Agricultural Finance: The Experience of DrumNet*, in INNOVATIONS IN RURAL AND AGRICULTURE FINANCE (Renate Kloppinger-Todd & Manohar Sharma eds., 2010).

⁵⁰ See Jacob Yaron & McDonald Benjamin, *Developing Rural Financial Markets*, FIN. & DEV. 40, 40 (1997).

cond, rural development has been stymied in almost all low-income countries by policies that favor industry over agriculture and urban areas over rural areas.⁵¹ Third, in agriculture there is considerable lag time between capital investments and increased cash flows, which requires longer loan maturities and irregular repayment schedules.⁵² Fourth, more than many other sectors of the economy, profitability of small 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.⁵³ Fifth, commercial banks are not interested in lending in rural agricultural areas in low-income countries because of their poor legal and financial infrastructures.⁵⁴

The absence of these necessary legal prescriptions for financing 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.⁵⁵ 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.⁵⁶ 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.⁵⁷ As a result of the necessary legal regimes, more than half of the farms in low-income countries have no access to credit, and in the Middle East and sub-Saharan Africa specifically, the number reaches eighty percent.⁵⁸

Most smallholder farmers in low-income countries do not have access to well-established legal rules for dealing with agriculture financing.⁵⁹ In-

⁵¹ *See id.*

⁵² *See* INT’L FIN. CORP., SCALING UP ACCESS TO FINANCE FOR AGRICULTURAL SMES, POLICY REVIEW AND RECOMMENDATIONS 11 (2011).

⁵³ *Id.* at 18.

⁵⁴ *See* Gerard van Empel, *Rural Banking in Africa: The Rabobank Approach*, in INNOVATIONS IN RURAL AND AGRICULTURE FINANCE (Renate Kloppinger-Todd & Manohar Sharma eds., 2010).

⁵⁵ *See, infra* Part III.

⁵⁶ *See id.*

⁵⁷ *See* Wade Channell, USAID, *Bringing More Dead Capital to Life*, 8 RAFI NOTES (Dec. 2006), available at http://www.ruralfinance.org/fileadmin/templates/rflc/documents/1179414032263_RAFI_Note_8.pdf; INVESTMENT CLIMATE ADVISORY SERVICES (WORLD BANK GROUP), SECURED TRANSACTIONS SYSTEMS AND COLLATERAL REGISTRIES (2010), available at <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).

⁵⁸ *See* INVESTMENT CLIMATE ADVISORY SERVICES, *supra* note 61 at 6. *See generally* PHILIP R WOOD, MAPS OF WORLD FINANCIAL LAW (5th ed. 2005).

⁵⁹ *See* Stemler & Raymond, *supra* note 5, at 282.

stead, their transactions are guided by informal systems which can foster corruption, inefficiency, and “who you know” type financing.⁶⁰ 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.”⁶¹ 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.⁶²

C. The Importance of Collateral

In many low-income countries, the law looks at collateral from a “pawnshop” perspective: the financier must physically retain the collateral.⁶³ Weaknesses in security laws in relation to “the creation, perfection, filing, and execution of security interests against movable property⁶⁴ hamper the introduction of financial innovations, such as agricultural leasing,⁶⁵ warehouse receipts,⁶⁶ factoring,⁶⁷ and harvest and working capital finance (including all forms of value chain finance).”⁶⁸ Where existing or lack of existing legislation casts doubt on the capacity of assets to secure a loan, corrective legislation needs to be introduced.

Heywood Fleisig, in his seminal work “The Power of Collateral,”⁶⁹

⁶⁰ United Nations Development Program, *Integrating Legal Empowerment of the Poor in UNDP's Work: A Guidance Note*, UNITED NATIONS DEV. PROGRAMME 1 (Jul. 21, 2010), <http://www.undp.org/content/dam/aplaws/publication/en/publications/democratic-governance/dg-publications-for-website/guidance-note-on-legal-empowerment-of-the-poorlep/LEP/Guidance/Note/July/2010.pdf>.

⁶¹ INT'L FIN. CORP, *supra* note 56, at 11.

⁶² *See id.*

⁶³ Jessop et al., *supra* note 50, at 89.

⁶⁴ International Institute for the Unification of Private Law [UNIDROIT], *UNIDROIT's Cape Town Convention: Proposed Fourth Protocol on Mining, Agricultural, and Construction Equipment: Issues for Discussion*, UNIDROIT 2012- C.D. (91) 4(c) – Add. 1 (CEAL Draft Attachment 1) (May 2012).

⁶⁵ A lease is a contractual arrangement calling for the lessee (user) to pay the lessor (owner) for use of an asset. In agriculture most things can be leased, such as equipment, storage, feeders, and even processing systems.

⁶⁶ A warehouse receipt is a document that provides proof of ownership of commodities (e.g., bars of copper) that are stored in a warehouse, vault, or depository for safekeeping. Negotiable warehouse receipts allow transfer of ownership of that commodity without having to deliver the physical commodity, thereby allowing the document to be used as collateral for lending. U.C.C. Art 7.

⁶⁷ Factoring is a financial transaction in which a business sells its accounts receivable (i.e., invoices) to a third party (called a factor) at a discount. It is often used by farmers as a means to receive cash today for outstanding commodity sales.

⁶⁸ *See* Jessop et al., *supra* note 50, at 89.

⁶⁹ Heywood Fleisig, *Secured Transactions: The Power of Collateral*, 33 FIN. & DEV. 44 (1996). *See also* Heywood Fleisig, *The Economies of Collateral and Collateral Reform*, in SECURED TRANSACTIONS REFORM AND ACCESS TO CREDIT 84–88 (Frederique Dahan & John Simpson eds., 2008).

noted several obstacles to the use of collateral, many of which continue to present problems in the developing and transitional economies (as well as many advanced ones).⁷⁰ For example:

- **Creation:** problems that exclude goods, agents, and transactions
 - Limits on who can be a party to a security agreement⁷¹
 - Limits on coverage of goods and transactions⁷²
 - Limits on using a general description of collateral or a floating security interest⁷³
 - Limits on creating a security interest in after-acquired collateral or after-created debt⁷⁴
- **Priority:** problems that undermine lenders' security
 - No priority rules for future advances⁷⁵
 - Limits on the continuation in proceeds and products of a security interest⁷⁶
 - Limits on creating security interests in fixtures⁷⁷
 - Divided registration systems that cause conflicts in priority rules⁷⁸
- **Publicity:** problems that hamper filing or retrieval of records of security interests
 - Restrictions on access to registry records⁷⁹
 - Requirement for inspection of documents⁸⁰
 - Requirement for filing documents rather than simply notices⁸¹

⁷⁰ HEYWOOD FLEISIG, MEHNAZ SAFAVIAN & NURIA DE LA PENNA, REFORMING COLLATERAL LAWS TO EXPAND ACCESS TO FINANCE (2006).

⁷¹ See Heywood Fleisig, *Secured Transactions: The Power of Collateral*, *supra* note 73, at 45. It is important to note, collateral alone cannot be the solution, it is a part of the solution as can be seen by this complete list. See also Florenicio Lopez-de-Silanes, *Turning the Key to Credit: Credit Access and Credit Institutions*, in SECURED TRANSACTIONS REFORM AND ACCESS TO CREDIT 10 (Frederique Dahan & John Simpson eds., 2008).

⁷² See Heywood Fleisig, *Secured Transactions: The Power of Collateral*, *supra* note 73, at 45.

⁷³ See *id.*

⁷⁴ See *id.* at 46.

⁷⁵ See *id.*

⁷⁶ See *id.*

⁷⁷ See *id.*

⁷⁸ See *id.*

⁷⁹ See *id.*

⁸⁰ See *id.*

⁸¹ See *id.* This issue pulls together the discussion of wealth. For example, Professor of Finance Lopez-de-Silanes argues that "richer countries have lower level of procedures to register property." Lopez-de-Silanes, *supra* note 75, at 20.

- Multiple and unlinked registries⁸²
- Lack of advance filing and blocking⁸³
- High fees for filing⁸⁴
- Enforcement: problems that prevent rapid seizure and sale of collateral⁸⁵
- Court-administered sales⁸⁶
- Delay caused by bankruptcy procedures⁸⁷

In the case of agricultural enterprises mobile property—such as cars, tractors, farming equipment, inventory, crops, cows, and a host of other valuable assets—it can serve as collateral and broaden the financing options for farmers and lenders.⁸⁸ However, such property can only be used effectively for secured lending if the legal system permits its use as collateral. 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 system in 2001 reduced risk premiums by half and lowered interest rates by five percent.⁸⁹ In Peru, a broad range of producers believed that loans for seed, fertilizer, pesticides, and fungicides would double output.⁹⁰ Furthermore, in industrial countries, borrowers with collateral get nine times the level of credit given their cash flow compared to borrowers without collateral.⁹¹ They also benefit from longer repayment periods (eleven times longer) and significantly lower interest rates (fifty percent lower).⁹² However, as Professor Fleisig notes, few countries have the ability to use collateral in such a manner, thereby greatly limiting access to finance to agricultural enterprises. Smallholding farmers often suffer the greatest impact because the

⁸² See *id.* “Credit registries are especially important to SME as their creditworthiness is harder to evaluate.” See *e.g.*, Beck, *supra* note 41, at 65.

⁸³ See LOPEZ-DE-SILANES, *supra* note 75, at 20.

⁸⁴ See *id.*

⁸⁵ Some argue enforcement is a real, important, and immediate need. See Lopez-de-Silanes, *supra* note 75, at 13.

⁸⁶ See *id.*

⁸⁷ See *id.* Legal reform is often argued as a key to improvement in the overall access to finance. See *id.* at 26.

⁸⁸ See Channell, *supra* note 61.

⁸⁹ See Spiros Bazinas, *Key Policy Issues of the UNCITRAL Draft Legislative Guide on Secured Transactions*, in *RÉFORME DES SÛRETÉS MOBILIÈRES: LES ENSEIGNEMENTS DU GUIDE LEGISLATIF DE LA CNUDCI* (Bénédict Foëx et al. eds., 2007).

⁹⁰ See Heywood W. Fleisig & Nuria de la Peña, *Peru: How Problems in the Framework for Secured Transactions Limit Access to Credit*, 3 *NAFTA: L. & BUS. REV. AM.* 33 (1997).

⁹¹ See Rodrigo Chaves, Nuria de la Peña & Heywood Fleisig, *SECURED TRANSACTIONS REFORM: EARLY RESULTS FROM ROMANIA, CEAL ISSUES BRIEF* (2004), available at <http://www.ceal.org/publications/CEALRomaniaSecTransNote.pdf>.

⁹² See *id.*

absence of land ownership, coupled with the above limitations, make financing an impossibility.

II. IMPROVING ACCESS TO FINANCE THROUGH COLLATERAL

The inability to use collateral as a means to generate finance places smallholding farmers at a great disadvantage; especially in climates prone to widespread instability. As previously discussed, the use of collateral as a finance mechanism can greatly open doors to credit that can be used for seeds, irrigation, and other essential needs. However, many countries lack secured finance regimes that utilize anything other than land ownership as a collateral source. Inroads have been made in the international community to improve the use of collateral as a finance tool. Despite these inroads and the obvious need of improving finance to agriculture, few international instruments have been promulgated to relieve the deficit. This section will explore one of the most comprehensive and recent international attempts to improve the access to finance through the use of asset-based financing, the Convention on International Interests in Mobile Equipment (the Cape Town Convention),⁹³ and it will consider if its proposed extension to cover agricultural equipment will assist in removing the financial barriers that exist for smallholding farms.

A. History and Overview of the Cape Town Convention

The Cape Town Convention was born out of a need to address many of Professors Fleisig's previously identified issues,⁹⁴ especially related to the use of highly mobile property as collateral. Originally, the Convention was intended to embody rules to govern all moveable asset classes of equipment.⁹⁵ However, after several attempts⁹⁶ and many study group meetings,⁹⁷ it became clear that a convention covering all classes of highly mobile equipment was not a possibility.⁹⁸ Thus, a dual structure was to be created:⁹⁹ a Convention¹⁰⁰ to establish the general rules applicable to all those

⁹³ Convention on International Interests in Mobile Equipment, Nov. 16, 2001, S. TREATY DOC. NO. 108-10 (2003), 2307 U.N.T.S. 285 [hereinafter Cape Town Convention].

⁹⁴ See Fleisig, *supra* note 73.

⁹⁵ See UNIDROIT, RESTRICTED EXPLORATORY WORKING GROUP TO EXAMINE THE FEASIBILITY OF DRAWING UP UNIFORM RULES ON CERTAIN INTERNATIONAL ASPECTS OF SECURITY INTERESTS IN MOBILE EQUIPMENT: REPORT (1996), available at <http://www.unidroit.org/english/documents/1992/study72/s-72-05-e.pdf> [hereinafter UNIDROIT, Study LXXII,] Doc 5.

⁹⁶ See *id.*, Doc 3, 4, 5.

⁹⁷ See *id.*, Doc 5..

⁹⁸ See *id.*

⁹⁹ See *id.*

¹⁰⁰ In November of 2001, the Cape Town Convention and the Protocol to the Convention on Matters

classes of equipment¹⁰¹ and an equipment-specific series of Protocols that would implement asset specific rules.¹⁰²

- Accordingly, the minimum requirements for the triggering of the applicability of the Convention are the following:
- The existence of an international interest, which can be one of the following:
- An interest granted under a security agreement;
- An interest vested in a conditional seller under a title reservation agreement;
- Or an interest vested in a lessor under a leasing agreement.
- The fulfillment of formalities in respect of an international interest, which are, that (a) it be in writing; (b) it must be related to an object in respect of which the chargor, the conditional seller, or the lessor has the power to enter into contractual relations; (c) the object that is subject to the agreement must be uniquely identifiable; and (d) the obligations contemplated by the agreement must be identifiable.
- The debtor is situated in a contracting nation when the agreement is concluded (it is irrelevant that the creditor may be located in a non-contracting nation).¹⁰³

At first glance, a reading of the Convention's language alone clearly demonstrates inherent issues with future protocols. For example, the lan-

Specific to Aircraft was signed by 29 countries including the United Kingdom and the United States. The Convention entered into force on April 1, 2004 a full 16 years after the first UNIDROIT discussion of the topic. See *Status of the Convention on International Interests in Mobile Equipment*, UNIDROIT, <http://www.unidroit.org/status-2001capetown> (last visited Jan. 24, 2014); Ronald C.C. Cuming, *International Regulation of Aspects of Security Interests in Mobile Equipment*, 1 UNIF. L. REV. 63 (1990).

¹⁰¹ See UNIDROIT, Study LXXII, Doc 5, *supra* note 99.

¹⁰² See *id.* Specifically the Aircraft Protocol, the Railway Rolling Stock Protocol, and the Space Assets Protocol. The Aircraft Protocol came into on January 3, 2006. See Protocol To The Convention On International Interests In Mobile Equipment On Matters Specific To Aircraft Equipment, Nov. 16, 2001, S. TREATY DOC. NO. 108-10 (2003) [hereinafter Aircraft Protocol]. Although complete, the Railway Rolling Stock Protocol is not in force. See Luxembourg Protocol To The Convention On International Interests In Mobile Equipment On Matters Specific To Railway Rolling Stock, *opened for signature* Feb. 23, 2007 [hereinafter Railway Protocol], available at <http://www.unidroit.org/status-2007luxembourg-rail> (last visited Jan. 22, 2014). While the newest Protocol, the Space Protocol is also not in force. See Protocol to the Convention on International Interests in Mobile Equipment on Matters Specific to Space Assets, *opened for signature* Mar. 9, 2012 [hereinafter Space Protocol], available at <http://www.unidroit.org/instruments/security-interests/spaceprotocol> (adopted during a diplomatic conference convened by Germany in Berlin from February 27–March 9, 2012).

¹⁰³ See Cape Town Convention, *supra* note 97, at art. 2.

guage of Article 2 is clearly designed to limit the coverage of the Convention, and this will cause ongoing issues with future protocols. The use of the phrase “uniquely identifiable” will become problematic during any discussions of equipment that has multiple models, variations, and updates; this will be a specific issue within the considerations of the Agricultural Equipment Protocol.¹⁰⁴ The term “international”¹⁰⁵ will lead many to wonder the precise meaning of the term, leading to arguments that the Convention should only cover equipment that crosses national boundaries while identified as covered by a security agreement.¹⁰⁶

While the full breadth of the Convention is beyond the scope of this paper,¹⁰⁷ three features of the Convention are worth highlighting with regard to the proposed Agricultural Equipment Protocol. First, the Convention’s reach extends to proceeds¹⁰⁸ and “associated rights,” which are “rights to payments or other performance by a debtor under an agreement that is secured by or associated with the object.”¹⁰⁹ While the Convention and Protocols cover a narrow range of asset categories, the inclusion of proceeds can cause difficulties since both areas overlap with bankruptcy and banking regulations. Moreover, proceeds and associated rights create a legal structure that demands a system of highly active purchasers and lenders who need to search registries for prior existing interests in any potential proceeds or associated rights. In systems that often retain historically inaccurate, outdated, or centrally located networks of registration that rely upon paper based filing, this requirement places too much pressure on lenders to remain vigilant.

Second, the Convention also requires the establishment of an electronic registry system,¹¹⁰ although the specifics of the particular registry are left to further development in subsequent Protocols.¹¹¹ The Aircraft Protocol international registry, for example, includes the registration, amendment, extension, or discharge of actual and prospective international interests, assignments, acquisitions, registrable non-consensual rights and interests, and notices of national interests.¹¹² The use of a registration system of secured

¹⁰⁴ See *infra* notes 234–241.

¹⁰⁵ An “international interest” is defined by the Convention “an interest held by a creditor to which (Convention) Article 2 applies.” Cape Town Convention, *supra* note 97, at art. I(o).

¹⁰⁶ See *infra* notes 225–232.

¹⁰⁷ The University of Washington, School of Law and the University of Oxford Faculty of Law hosts a joint undertaking, including a repository, on information covering the Cape Town Convention. See *The Cape Town Convention Academic Project*, UNIVERSITY OF WASHINGTON SCHOOL OF LAW, <http://www.law.washington.edu/Programs/CTCproject/>.

¹⁰⁸ See Cape Town Convention, *supra* note 97, at art. 2(5).

¹⁰⁹ *Id.* at art. I(b).

¹¹⁰ See *id.*, at ch. IV, art. 18.

¹¹¹ See *id.* at ch. IV, art. 18(5).

¹¹² See INTERNATIONAL REGISTRY OF MOBILE ASSETS, <https://www.internationalregistry.aero/ir-web/>.

finance is one of the hallmarks of the American style system of secured transactions.¹¹³ The purpose of such a registry is to reduce creditor uncertainty by providing a system that records prior existing security interests. Such a use, however, is not common in all systems, and its overall acceptance would be uncertain should a wider asset category such as agricultural equipment be included.

And third, one of the ongoing criticisms of the Convention and Protocols is the potential overlap with existing systems of secured finance. In situations where the collateral is covered by both a domestic registration requirement¹¹⁴ and a newly created international registration requirement, issues can occur if both systems are not satisfied. Insolvency regimes on domestic systems also often conflict and become a major issue when agreements exist in one location and the collateral is moved to a location with a different system. To remedy this situation, domestic requirements need to be reduced and/or eliminated to create a single system covering the asset category, especially in insolvency situations. For example, any country that has ratified the Convention and Aircraft Protocol provides creditors with the following rights: to deregister the aircraft¹¹⁵ and procure its export,¹¹⁶ to take possession or control of the aircraft,¹¹⁷ to sell or grant a lease in the aircraft, and to collect or receive income or profits arising from the management or use of the aircraft.¹¹⁸ This allowed small domestic markets to feel little impact from the Aircraft Protocol in terms of cost, regulation, and uncertainty. As a result of this foresight and local recognition, the Aircraft Protocol was widely supported by the aviation industry, including its financiers.¹¹⁹ The Protocol covers a narrow asset pool with a small group of highly involved companies and financing institutions.¹²⁰ One must wonder, what will occur when the industries are not clearly defined and when the

¹¹³ One of the criticisms of international harmonization efforts within the secured transactions areas is the continued influence of U.S. U.C.C., Article 9 and the influence of US business interests. See Gerald McCormack, *Pressured by the Paradigm: The Law Commission and Company Security Interests*, in THE REFORM OF UK PERSONAL PROPERTY SECURITY LAW COMPARATIVE PERSPECTIVES 73–75 (John De Lacy ed., 2011) (arguing to be a coercive transplant).

¹¹⁴ Of course, the international registry is intended to eventually become the sole register for all transactions related to aircraft objects creating international interests. The exception would be those interests covering aircraft used for military, customs or police services and those that are purely state internal transactions when a “national registry” exists in a Contracting State. See Aircraft Protocol, *supra* note 106, at art. I(2)(c).

¹¹⁵ *Id.* at art. IX(1)(a), XIII.

¹¹⁶ *Id.* at art. IX(1)(b).

¹¹⁷ *Id.* at art. XI.

¹¹⁸ See Anthony Saunders, Anand Srinivasan & Ingo Walter, INNOVATION IN INTERNATIONAL LAW AND GLOBAL FINANCE: ESTIMATING THE FINANCIAL IMPACT OF THE CAPE TOWN CONVENTION (2006), available at <http://ssrn.com/abstract=894027>.

¹¹⁹ See Jeffrey Wool & Andrew Littlejohns, *Cape Town Treaty in The European Context: The Case for Alternative A, Article XI of the Aircraft Protocol*, 24 AIRFINANCE ANNUAL 43, 44 (2007–2008).

¹²⁰ See *infra* note 138.

asset categories are not easily identifiable as solely domestic?¹²¹

B. The Importance and Impact of the First Protocol

In order to understand the difficulties surrounding the extension of the Cape Town Convention to cover agricultural equipment, the following sections will examine the Convention's impact on other related industries. Sections B and C of this part will examine existing protocols—the economic impact of the first protocol, the Airport Protocol, and the newer Rail and Space Protocols on their respective industries. This analysis will serve to highlight key issues concerning the Convention's proposed extension into the agricultural equipment area.

Since the Convention, the Aircraft Protocol, and corresponding registry are in full force, the impact of the First Protocol will serve as a starting point of the discussion. As Professors Saunders, Srinivasan, and Walter suggest,¹²² one of the immediate and direct benefits tied to the Aircraft Protocol is the potential to “allow emerging-market airlines access to secured debt on a commercial basis as well as to international capital markets by avoiding in whole or in part the conventional country-risk premium.”¹²³ The Aircraft Protocol will also “give airlines increased and lower cost access to securitized global debt markets through enhanced debt ratings.”¹²⁴ In fact, the UNIDROIT economic impact study supports such a hypothesis to an unexpectedly positive level.

“First, countries that sign and ratify the Cape Town Convention and Protocol would give their airlines access to capital at more competitive international financing rates.” The final estimation is almost staggering. Saunders, Srinivasan, and Walter found “that the average country in the data sample would save, in aggregate, between \$7.6 billion and \$11.1 billion over the 20-year estimation period, and that the average low-income country would save between \$4.6 and \$6.8 billion, based on Boeing's forecast for future aircraft orders between 2004 and 2023.”¹²⁵

“Second, the Cape Town Convention and Protocol (and the Registry) will provide enhanced ability for airlines (especially in developing countries) to take advantage of lower secured financing rates.”¹²⁶ In practical terms, the study authors “estimate that this difference would lead to interest savings of between 13% and 20% per dollar of principal borrowed for air-

¹²¹ *See id.*

¹²² Saunders, *supra* note 122, at 7.

¹²³ *Id.* A country risk premium is the additional risk associated with investing in an international company rather than the domestic market. It is often assessed based on the risks associated with reaching into a given market. This premium is almost always higher in systems that lack appropriate legal and financial mechanisms to protect investors.

¹²⁴ *Id.*

¹²⁵ *Id.* at 31.

¹²⁶ *Id.*

craft financings that are not already covered by protections comparable to those provided by the Cape Town Convention and Protocol.”¹²⁷

Third, “the Cape Town Convention and Protocol results in two benefits to airlines—a direct benefit in terms of reduction of interest costs for aircraft financed by secured lending subject to the terms of the Protocol, and an indirect benefit in terms of a better overall rating for all debt issued by the airline concerned.”¹²⁸ The authors note that “a rating increase leads to a reduction of at least 0.5% in interest cost on the overall debt of an airline company.”¹²⁹ Moreover, “signing and ratifying the Cape Town Convention and harvesting the benefits of the Protocol will likely increase the stock market valuation of publicly-traded airlines by at least 10%.”¹³⁰

Should these estimations, even erring on the side of the conservative reading of the estimates, turn out to be accurate, the long-term impacts of the Aircraft Protocol are impressive. However, for the purposes of this paper, it is important to note that the Aircraft Protocol covers a narrow type of asset,¹³¹ with a small group of very sophisticated companies and potential financiers in the market.¹³² While the drafters did need to adapt the Protocol to cover some variance within the asset category, such as helicopters,¹³³ and did need to adapt to the specific issues related to the need to replace parts, such as helicopter engines,¹³⁴ the aircraft asset category is in many ways easily segregated from other categories of movable assets. In addition, the aircraft industry itself has a history of some level of cooperation as demonstrated by the regime covering civil aviation¹³⁵ and several existing Conventions.¹³⁶

It is also important to note that aircraft, unlike any other asset category within other protocol, are truly highly mobile across national boundaries even after being used as collateral. The collateral standing behind the security agreement literally flies away, oftentimes into jurisdictions that lack

¹²⁷ *Id.*

¹²⁸ *Id.* at 32.

¹²⁹ *Id.* at 7.

¹³⁰ *Id.*

¹³¹ “Aircraft objects” means airframes, aircraft engines and helicopters. Aircraft Protocol *supra* note 106, at art. I(2)(c).

¹³² See Saunders, *supra* note 122, at 31 (discussing the total number of lenders and registry entries, to date).

¹³³ See Aircraft Protocol, *supra* note 106, at art. IV(2).

¹³⁴ For example, “[o]wnership” of or another right or interest in an aircraft engine shall not be affected by its installation on or removal from an aircraft.” *Id.* at XIV(3).

¹³⁵ See The International Civil Aviation Organization, Convention on International Civil Aviation, Dec. 7, 1944, 61 Stat. 1180, 15 U.N.T.S. 295, available at http://www.icao.int/publications/Documents/7300_cons.pdf (drafted to ensure safety, cooperation, basis of equality of opportunity and operated soundly).

¹³⁶ See Aircraft Protocol *supra* note 106, at ch. V (noting the Convention on the International Recognition of Rights in Aircraft, Convention for the Unification of Certain Rules Relating to the Precautionary Attachment of Aircraft, and UNIDROIT Convention on International Financial Leasing).

harmonized and modernized secured transactions, insolvency law, or both, that would protect the security interest holder.¹³⁷ For this reason there was an international push to modernize and harmonize the various national registration systems applicable to security/title retention financing devices related to aircraft. Should the harmonization efforts have failed, many seeking finance would have been left without financiers willing to risk the loss of the collateral in foreign collection, insolvency proceedings, or both.¹³⁸

Time will tell if the advantages of these extraordinary numbers will be realized by other Protocol asset categories; however, few argue against the impressive nature of the first protocol.

C. The Newest Protocols

After the success of the Aircraft Protocol, UNIDROIT undertook to finalize the other two originally intended protocols, the Protocol to the Convention on International Interests in Mobile Equipment on Matters specific to Railway Rolling Stock (2007)¹³⁹ and the Protocol to the Convention on International Interests in Mobile Equipment on Matters Specific to Space Assets (2012).¹⁴⁰ In many ways the additional protocols benefited from the success of the Aircraft Protocol. The drafting process was mostly replicated, as the economic benefits were similar. Unfortunately, both additional protocols have suffered drafting and implementation setbacks. This paper will not attempt to cover these protocols or the specific secured finance mechanism in detail and will instead focus on some of the difficulties faced by the newest protocols which inform the creation of the Agricultural Protocol.

1. The Rail Protocol

The Luxembourg Protocol to the Convention on International Interests in Mobile Equipment on Matters Specific to Railway Rolling Stock (the Rail Protocol or Second Protocol) was adopted and opened to signature on

¹³⁷ A point to be further explored and discussed later. See international and highly mobile, *infra* notes 225-232 and corresponding discussion.

¹³⁸ See e.g., Channell, *supra* note 61 (discussing limitations created with a system that fails to capture collateral); Bazinas, *Key Policy Issues of the UNCITRAL Draft Legislative Guide on Secured Transactions*, *supra* note 93 (discussing enforcement as a major barrier to creation of the system); See Fleisig *Peru: How Problems in the Framework for Secured Transactions Limit Access to Credit*, *supra* note 94 (discussing the issues that arose in Peru and the efforts to overcome barriers.). Of course, this is especially true of airlines within undeveloped or unreformed legal systems..

¹³⁹ Space Protocol, *supra* note 106.

¹⁴⁰ Three states (Burkina Faso, Saudi Arabia, and Zimbabwe) signed the Space Protocol during the closing ceremony of the conference on March 9, 2012. Germany signed the Space Protocol on November 21, 2012. See *id.*

February 23, 2007, but it has not yet entered into force.¹⁴¹ The rail sector was chosen as one of the first sectors to be covered by the Convention because, by their nature, railway rolling stock can easily cross borders creating risk for international financiers.¹⁴² However, unlike the other Protocols within the Cape Town Convention purview, most States have no domestic system to register liens on rolling stock.¹⁴³ As a consequence, the Convention creates additional security for lenders financing rolling stock, even if just financed as a part of a domestic regional transaction.¹⁴⁴ The absence of domestic registration allowed for a smoother and quicker process of drafting, as the domestic barriers to creating a rolling stock regime were minimal.

It is important to note that the rail sector, unlike the other asset types discussed in this paper thus far, is deceptively large. It covers not only passenger and freight wagons, locomotives and specialist rail equipment, but also light rail, city underground rail, and tram transportation systems.¹⁴⁵ And, most importantly, it includes railway rolling stock that provides public services.¹⁴⁶ Unsurprisingly, the inclusion of public service entities causes local issues relating to state mandates and the need to regulate such activities.¹⁴⁷ Furthermore, state entities often suffer from the lack of available finance and budgetary constraints, an occurrence that unsurprisingly impacts railway rolling stock as well.¹⁴⁸ Consequently, one of the main pushes behind the Rail Protocol was the creation of international interests, registries, and default rules that would be harmonized across borders. It is hoped that this Protocol would encourage larger private investment.¹⁴⁹

Community of European Railway and Infrastructure Companies Executive Director Libor Lochman notes: “Rail’s economic benefit is enormous, with direct annual contributions of EUR 66 billion in gross value added”,¹⁵⁰ however, the rail industry urgently needs more capital investment.¹⁵¹ “In Europe, for example, the average life of freight rolling stock in

¹⁴¹ Railway Protocol, *supra* note 106. Four ratifications are required before the Rail Protocol can enter into force. Although five states and the European Union have signed the Rail Protocol, only Luxembourg has ratified it. *Id.*

¹⁴² See UNIDROIT, Study LXXII, Doc 5, *supra* note 99, at 5-6.

¹⁴³ See UNIDROIT, *Rep. of the Steering and Revisions Comm.*, Study LXXII H – Doc. 2 para. 9 (Mar. 16–17, 2000).

¹⁴⁴ See UNIDROIT, Study LXXII, Doc 5, *supra* note 99, at art. XIV.

¹⁴⁵ See Railway Protocol, *supra* note 106, at art. I(2)(e).

¹⁴⁶ See *id.* at art XXV.

¹⁴⁷ See UNIDROIT, Study LXXII, Doc 5, *supra* note 99, at art. I(2).

¹⁴⁸ See UNIDROIT, Study LXXII H - Doc. 5, Agenda Item 3.

¹⁴⁹ See *id.*

¹⁵⁰ Press Release, Community of European Railway and Infrastructure Companies, Can Rail help deliver a brighter future for Europe? (Dec. 2014), http://www.railworkinggroup.org/141201%20CER_IT%20Presidency_FINAL.pdf

¹⁵¹ See *id.*

circulation is close to its recommended useful life.”¹⁵² In addition to worn out rolling stock, other significant issues are stressing the current rail system. For example, as noted in the study completed by Roland Berger Consultants: “In general, the rail sector is unable to offer consistently modern rolling stock to customers despite a commercial need to do so, and in many countries there is a critical lack of capacity.”¹⁵³ “At the same time, manufacturing plants are being closed for lack of orders, losing valuable expertise, as more traffic shifts to the roads” out of necessity.¹⁵⁴ The rail sector is in the need for critical infrastructure development and serves a public need. Thus, the rolling stock industry is different than any other asset category discussed within this paper. That is not to say the absence of finance to improve rolling stock does not impact the food scarcity issue, as transportation is often a serious consideration within the food industry, it is merely a reminder of the nature of the asset and the impact that difference will have in drafting and implementation considerations.

The importance of the rail sector cannot be over-emphasized within our current debate. Unlike the other protocols discussed, the rail sector serves a clear and compelling national interest. For example, the European Commission in its White Paper entitled *European Transport Policy For 2010: Time To Decide* highlighted the issue by summarizing: “Between 1970 and 1998 the share of the goods market carried by rail in Europe fell from 21.1% to 8.4% (down from 283 billion tones per kilo meter to 241 billion), even though the overall volume of goods transported rose spectacularly.”¹⁵⁵ As emphasized by the UNIDROIT Diplomatic Conference To Adopt A Rail Protocol To The Convention On International Interests In Mobile Equipment, “in the coming years, for environmental, social and capacity reasons, the only practical way to expand the transportation sector in many countries, will be through the development of railways.”¹⁵⁶ UNIDROIT conference participants paid particular attention to the overall societal benefit in the case of railway rolling stock,¹⁵⁷ an emphasis that may assist in arguments to create an agricultural protocol.

For the purposes of drafting the Agricultural Protocol, some important points can be taken from the Railway Rolling Stock Protocol. First, railway rolling stock, in a similar manner as agricultural equipment, suffers from a

¹⁵² See RAIL WORKING GROUP, THE LUXEMBOURG RAIL PROTOCOL TO THE CAPE TOWN CONVENTION: A SIGNIFICANT STEP FORWARD FOR RAIL OPERATORS § 3 (2007), available at <http://www.railworkinggroup.org/r0134.pdf>.

¹⁵³ See *id.*

¹⁵⁴ See *id.*

¹⁵⁵ Commission White Paper on European Transport Policy For 2010: Time To Decide, at 25, COM (2001) 370 final (Dec. 9, 2010).

¹⁵⁶ UNIDROIT, Diplomatic Conference To Adopt A Rail Protocol To The Convention On International Interests In Mobile Equipment, UNIDROIT/OTIF 2006 – DCME-RP – Doc, at 22, (Feb. 14, 2007).

¹⁵⁷ See *id.* at 24.

lack of harmonized unique identification criteria.¹⁵⁸ The standard for many assets is to “label” every piece of equipment with a serial number; this is not the case for railway rolling stock.¹⁵⁹ This caused two issues for the group, both of which will impact the Agricultural Equipment Protocol. First, a system of labeling criteria would need to be established for the registry system to work. And second, although railway rolling stock is mobile across national borders, it is not necessarily highly mobile. Instead, railway rolling stock tends to transit a regional area.¹⁶⁰ In essence, this left the drafters with a dilemma concerning the method of registration: an international registry that would hold all information on all the rolling stock worldwide, or a regional system that covered railway rolling stock within the region.¹⁶¹ In the end, the Protocol established a method of unique identification¹⁶² and decided to maintain the international registry system established in the Convention.¹⁶³ Unfortunately, the Protocol has yet to receive the required number of signatories¹⁶⁴ leaving the impact or success of these solutions to a guess at best.

2. The Space Protocol

Without a doubt, the Space Protocol¹⁶⁵ is one of the most ambitious harmonization instruments drafted by UNIDROIT to date. This is primarily because at the inception of the project, space assets¹⁶⁶ were distinctive because there was “no law of any kind, national or international, governing

¹⁵⁸ See UNIDROIT, COMMITTEE OF GOVERNMENTAL EXPERTS FOR THE PREPARATION OF A DRAFT PROTOCOL TO THE CONVENTION ON INTERNATIONAL INTERESTS IN MOBILE EQUIPMENT ON MATTERS SPECIFIC TO RAILWAY ROLLING STOCK 5 (June 17-19, 2002) [hereinafter UNIDROIT, Study LXXII H, Doc. 7].

¹⁵⁹ See *id.*

¹⁶⁰ See UNIDROIT, COMMITTEE OF GOVERNMENTAL EXPERTS FOR THE PREPARATION OF A DRAFT PROTOCOL TO THE DRAFT UNIDROIT CONVENTION ON INTERNATIONAL INTERESTS IN MOBILE EQUIPMENT ON MATTERS SPECIFIC TO RAILWAY ROLLING STOCK § 3 (Mar. 15–16, 2001) [hereinafter Study LXXII H, Doc. 5].

¹⁶¹ See UNIDROIT, Study LXXII H, Doc. 7, *supra* note 162 at 5.

¹⁶² See Railway Protocol, *supra* note 106, at arts.V and XIV.

¹⁶³ See *id.*, at art. XV.

¹⁶⁴ See UNIDROIT, Study LXXII, Doc 5, *supra* note 99.

¹⁶⁵ Space Protocol, *supra* note 106.

¹⁶⁶ “Space asset” means any man-made uniquely identifiable asset in space or designed to be launched into space, and comprising: (i) a spacecraft, such as a satellite, space station, space module, space capsule, space vehicle or reusable launch vehicle, whether or not including a space asset falling within (ii) or (iii) below; (ii) a payload (whether telecommunications, navigation, observation, scientific or otherwise) in respect of which a separate registration may be effected in accordance with the regulations; or (iii) a part of a spacecraft or payload such as a transponder, in respect of which a separate registration may be effected in accordance with the regulations, together with all installed, incorporated or attached accessories, parts and equipment, and all data, manuals and records relating thereto. See Space Protocol, *supra* note 106, at art. 1(k).

dealings with objects in outer space.”¹⁶⁷ As noted by Professor Sir Roy Goode: “Hence for these assets there is an even stronger need for an international set of rules governing security, title reservation, and leasing interests in such equipment.”¹⁶⁸

For the Space Protocol, one of the biggest difficulties arose because of the continued insistence by certain sectors of the space industry that the draft Protocol was not needed. These sectors were primarily concerned that the Protocol would create an unnecessary layer of supranational law and that it would raise, rather than lower, the costs of commercial space financing, principally due to the text’s complexity.¹⁶⁹ To deal with these issues, a working group was created consisting of leading players in the space industry, notably manufacturers, operators, launch service providers, financiers and insurers, as well as the relevant international organizations.¹⁷⁰ The Space Working Group was willing and able to respond to the needs and expectations of the commercial parties involved, and it conducted high-level government/industry meetings, which included commercial space, financial, and insurance communities.¹⁷¹ The involvement, support, and commitment of all stakeholders have been a large part of the planning of the Space Protocol.¹⁷²

Unsurprisingly, the Space Protocol faced many hurdles in the drafting process, most of which arose due to the nature of space assets. First, the term space asset suffered from a lack of definition in existing law, so its definition needed to be crafted. Unlike other Protocols, the pieces of the whole oftentimes are of significant value, both as a separate unit and as a portion of the overall space asset. Similar to the Aircraft Protocol, a concern was raised that individual components may require individual financing. For example, many space assets, like a satellite, contain many parts, such as transponders and relay systems.¹⁷³ Each component, as a separate highly valuable asset,¹⁷⁴ may be covered by its own security agreement. This caus-

¹⁶⁷ ROY GOODE, CONVENTION ON INTERNATIONAL INTERESTS IN MOBILE EQUIPMENT AND DRAFT PROTOCOL THERETO ON MATTERS SPECIFIC TO SPACE ASSETS: EXPLANATORY NOTE 2 (2011), available at <http://www.unidroit.org/english/conventions/mobile-equipment/conference2012/dcme-sp-04-e.pdf>.

¹⁶⁸ *Id.*

¹⁶⁹ See M.J. Stanford, *The Availability of A New Form of Financing For Commercial Space Activities: The Extension Of The Cape Town Convention To Space Assets*, CAPE TOWN CONVENTION J. (Sept. 2011).

¹⁷⁰ *See id.*

¹⁷¹ *See id.*

¹⁷² *See id.*

¹⁷³ For further information about satellites, satellite components and supporting devices and components, see *Satellite 101*, SATELLITE INDUSTRY ASSOCIATION, http://www.sia.org/wp-content/uploads/2011/10/SATELLITE_101_2011.pdf.

¹⁷⁴ The White and Case Press Release of \$586 million credit facility to Globalstar highlights some of the issues that must be considered. Press Release, White & Case, White & Case Advises on \$586 Million Mobile Satellite Financing (June 22, 2009), available at <http://www.whitecase.com/>

es issues when one party defaults on a security agreement covering an essential component of the satellite, as the satellite may have limited or no functionality without it. Thus, the creditor's exercise of its remedies upon default can potentially negatively impact third parties with security interests in other components of the satellite. Drafting rules to cover issues that arise in highly interwoven assets can be incredibly difficult, especially in the situation where the default of one party impacts many third parties. To avoid negatively impacting non-defaulting third parties, under the Protocol a creditor may not enforce an international interest in a space asset that is physically linked with another space asset so as to impair or interfere with the operation of the other space asset.¹⁷⁵ Of course, this issue is further complicated when, similar to the Railway Protocol, the space asset serves a public service function, such as communication. The Space Protocol thus, allows for a "public service notice"¹⁷⁶ to be registered in the international registry, which would prevent creditors from exercising any of the remedies "that would make the space asset unavailable for the provision of the relevant public service."¹⁷⁷ The ability of the working group to overcome intense debates on definitions and emerge with a final text is encouraging for the potential success of the Agricultural Protocol.

First, the ability and willingness to protect public services is encouraging as the Agricultural Protocol will likely need to consider similar issues as the equipment may be used for transport and other infrastructure development. In addition, the Space Protocol, similar to the Railway Rolling Stock Protocol, had to overcome the non-uniform manner of identification, ultimately deciding to follow the prior Protocol's solution.¹⁷⁸ Finally, as an important consideration for the overall paper, the Space Protocol is likely to have its greatest impact on startup and smaller operators that are all too often deprived of access to the capital markets, without which their chances of mounting a commercial venture were extremely limited.¹⁷⁹

In a similar manner as the Aircraft Protocol, which did little for the well-established airlines and instead greatly benefited start-ups, the Space Protocol is expected to see immediate impact on the startups.¹⁸⁰ This is an

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¹⁷⁵ Provided that the "international interest or sale has been registered with respect to the other space asset prior to the registration of the international interest being enforced." Space Protocol, *supra* note 106, at 8.

¹⁷⁶ *See id.* at 13.

¹⁷⁷ *Id.*

¹⁷⁸ *See id.* at 5.

¹⁷⁹ *See* Stanford, *supra* note 173.

¹⁸⁰ That is not to write that no impact will occur to the larger industry. For example, global space revenues grew by 12% in 2011 to total \$289.77 billion, with commercial satellite service revenues alone totaling \$110.53 billion, representing an increase of 9% over the previous year and 38% of the total revenue generated by global space activity. *See id.* at 117. In terms of future developments, it is worth noting that, while these figures are expected to continue growing – and in particular in emerging markets,

important aspect within technology to an even greater extent than in the airline industry, as satellite industry analysts have long taken the view that emerging industry players will largely influence the cost and quality of future global space-based services.¹⁸¹ And nearly all analysts agree that the key players will be “[t]he next generation of space activity will include non-traditional stakeholders,”¹⁸² such as “small private companies, new entrepreneurial space ventures, and non-profit Organisations.”¹⁸³ This makes the drafting of the Space Protocol and the success of the implementations particularly relevant to discussions concerning small to medium entrepreneurial enterprises, such as farms.

III. EXTENDING THE CONVENTION INTO AGRICULTURAL EQUIPMENT

As the Cape Town Convention began to finalize the first three protocols, Members of the Governing Council turned their attention to the extension of the Convention into additional areas. In 2006, the Secretariat began preliminary work on the extension of the Convention to include Mining Agricultural and Construction equipment.¹⁸⁴ As with the previous Protocols, the new Protocol in this area would provide a minimal legal framework for taking security interests in certain MAC equipment and create a global filing archive for determining priority.

A. The Research

In order to begin considering the need to extend the Cape Town Convention into the areas of agricultural, mining and construction equipment, the Secretariat circulated a general interest questionnaire inviting responses

such as South-East Asia and the Middle East and despite recessionary environments in the United States and Europe. Peter Galace, *Strong Demand Driving Asia-Pacific Market*, SATELLITE MARKETS AND RESEARCH (June 4, 2012); P Koh, *Demand from Asia-Pacific Region Leading Satellite Industry Boom*, CHANNELNEWSASIA.COM (June 19, 2012), available at <http://www.satellitemarkets.com/news-analysis/strong-demand-driving-asia-pacific-satellite-market>; Staff Writers, *SES Gathers Momentum in Asia-Pacific with Further Significant Fleet Investment*, SPACE DAILY (June 21, 2012), available at http://www.spacedaily.com/reports/SES_Gathers_Momentum_In_Asia_Pacific_With_Further_Significant_Fleet_Investment_999.html (where it is noted in particular that ‘SES is ramping up investment activities in Asia-Pacific to meet the increasing demand for satellite capacity’).

¹⁸¹ See Stanford, *supra* note 173, at 120.

¹⁸² See *id.*

¹⁸³ See *id.*

¹⁸⁴ See UNIDROIT, *Draft Protocol to the 2001 Cape Town Convention on International Interests in Mobile Equipment on Matters Specific to Agricultural, Mining and Construction Equipment*, (Nov. 7, 2014) (It is important to note, this is not the only extension being considered. Currently, being considered, but in the early stages are two additional extensions: the ships and maritime transport equipment and off-shore power generation and similar equipment. See UNIDROIT 2013 – C.D. (92) 13 para. 18-21.

on the potential scope, application and benefits of a future protocol on agriculture, construction and mining equipment.¹⁸⁵ Thirty-one States replied to the survey, with all geographic regions and levels of economic development represented.¹⁸⁶ The questionnaire was comprised of a series of questions seeking detailed information in relation to eight specifically identified sectors (farming, forestry, fisheries, aquaculture, conventional mining, offshore mining, construction, and civil engineering).¹⁸⁷ While the responses were varied,¹⁸⁸ there was a general level of recognition of the potential benefits that would result from the preparation of a protocol, in particular in relation to the agriculture sector.¹⁸⁹

The survey results revealed both the need for such a protocol and some interesting concerns. First, there is indeed high-value mobile equipment (such as combine harvesters) used in agricultural equipment, with much higher percentages reported in developed economies (e.g., Germany: 75%, Austria 95%, Latvia 100%) as compared to developing economies and economies in transition (e.g., Pakistan: 20%, Ukraine: 21%).¹⁹⁰ In relation to the volume of the high-value mobile equipment that is imported or that moves across borders in the course of its activity, these volumes varied with some States reporting no movement, and others indicating high levels of importation (e.g., Hungary: 80–85%, Austria: 50%).¹⁹¹ Responses suggested that States with export industries exported a diverse range of high-value agricultural equipment, with tractors and harvesters being the most prevalent. Nearly all States indicated that there would be benefits arising from easier access to finance both in respect to high-value equipment and smaller-scale equipment.¹⁹² Lastly, nearly all States indicated that a new protocol related to agricultural, mining, and construction equipment would be beneficial to their country, that they would support the preparation of a protocol, or both.¹⁹³ Of particular note to the topics discussed in this paper, as many as twenty States indicated that between 80% and 100% of farming was in private hands (single farmer or other).¹⁹⁴ In addition, thirteen respondents

¹⁸⁵ See UNIDROIT, 86th Session of the Council (C.D. (86) 8 (d)) (Apr. 16-18, 2007).

¹⁸⁶ See *id.* In fact, the Questionnaire aroused considerable interest: “at the end of February 2007, 21 replies had been received from member States and 10 from non-member States, which were considerably higher numbers than usual. The United States did not reply, despite previously stating its support for the Protocol.” UNIDROIT, Item No. 5 (C) On The Agenda: International Interests In Mobile Equipment - Preparation Of Other Protocols To The Cape Town Convention, In Particular On Matters Specific To Agricultural, Mining And Construction Equipment (Apr. 2011) C.D. (90) 4(c)–Annex 1, at para. 2.

¹⁸⁷ See *id.* at 2.

¹⁸⁸ See *id.*

¹⁸⁹ See *id.*

¹⁹⁰ See UNIDROIT 2011 (11) C.D. (86) 8 (d), 2 (May 9-11, 2011).

¹⁹¹ See *id.*

¹⁹² See *id.*

¹⁹³ See *id.*

¹⁹⁴ See UNIDROIT, 2011–C.D. (90) 4(c)–Annex 1, at 8.

noted that greater facility in obtaining credit for smaller equipment would be beneficial.¹⁹⁵ Unfortunately, small equipment financing would not fall within the scope of the Cape Town Convention or the Agricultural Protocol.¹⁹⁶

Since this original study, the Center for the Economic Analysis of Law (CEAL) undertook an economic analysis. First, it is important to highlight comments in the CEAL report from a noted authority, Heywood Fleisig, who stated that “the economic impact of the proposed Fourth Protocol is potentially greater than any other Cape Town Convention Protocol to date, with an estimated \$2 trillion of mining, agricultural and construction (MAC) equipment potentially being covered by the Protocol.”¹⁹⁷ The paper also notes that the potential benefits of the “proposed Fourth Protocol would include providing new sources of funding by opening opportunities for MAC equipment to be used as collateral for loans, as well as improved terms for finance (lower interest rates, larger loan amounts and/or longer repayment periods) with the potential to boost demand for MAC equipment by \$600 billion.”¹⁹⁸ The draft report also highlights a number of limitations;¹⁹⁹ however, “each of which would likely need to be addressed for even of a fraction of that \$600 billion demand increase to be realized.”

B. The Growing Chorus of Support

Support for the Fourth Protocol has most publicly come from the United States. In a memorandum prepared by the UNIDROIT Secretariat, the United States’ view is expressed as follows:

Other than the contract farming work that is already in progress, the United States believes that work on a fourth Cape Town protocol covering agricultural, construction, and mining equipment should be the highest priority project on UNIDROIT’s work program. We believe that significant development benefits would result from such an extension of the Cape Town system. By facilitating the acquisition of advanced agricultural equipment, the protocol would aid food security efforts by contributing to

¹⁹⁵ See UNIDROIT, 2011–C.D. (90) 4(c)–Annex 1, at 15.

¹⁹⁶ *Id.* The Council did note that this issue might be explored in a separate document in the future. See *id.*

¹⁹⁷ UNIDROIT, *Item No. 5 on the agenda: International Interests in Mobile Equipment – (c) Preparation of other Protocols to the Cape Town Convention, in particular on matters specific to agricultural, mining and construction equipment*, C.D. (91) 4(c) – Add. 1 para. 2. (May 2012).

¹⁹⁸ See *id.*

¹⁹⁹ See *id.* at para. 3. Many of the noted existing limitations that will cause issue also arise in the creation and implementation of prior Protocols (previously discussed in the paper). For example, CEAL notes existing limitations in: “limitations on the categories of persons who may be parties), inadequate protections for a creditor’s priority interests, inefficient documentary procedures, and difficulties in enforcing creditors’ rights. In some jurisdictions, real estate is the only widely accepted form of collateral, making it difficult for businesses without real estate to finance acquisitions of MAC equipment.” *Id.*

local food production capabilities. Decreasing financing costs for construction equipment would help enable infrastructure projects in developing countries. Similarly, for countries whose economies rely heavily on natural resource extraction, making mining equipment more easily available would stimulate growth.²⁰⁰

Unsurprisingly, the support of the United States government for the project enjoys widespread open support from major industry players. For example, the President's Export Council, led by the Chairman of Boeing and consisting of leaders of companies such as Dow Corning, Ford Motor Company, UPS, United Continental Holdings, and Archer Daniels Midland, has endorsed the extension.²⁰¹ Similarly, the National Association of Manufacturers has urged UNIDROIT to move forward with this project,²⁰² as have the Association of Equipment Manufacturers, the Equipment Leasing and Finance Association, the American Rental Association, the North American Equipment Dealers Association, and the Associated Equipment Distributors (collectively).²⁰³ Caterpillar has also expressed support for the Fourth Protocol.²⁰⁴

C. An Extension Too Far

Despite support from the United States and industry participants, concerns remain about extending the Cape Town Convention into a fourth area of coverage.

1. Initial Concerns

In the discussion about the extension of the Cape Town Convention during UNIDROIT proceedings, experts, and invited commentators ex-

²⁰⁰ UNIDROIT, *Item No. 13 on the agenda: Draft Triennial Work Programme 2014-2016 – Comments received by the Secretariat*, C.D. (92) 13 Add. 2 at 14 (Apr. 2013).

²⁰¹ See Letter from Jim McNerney, Chairman, President's Export Council, to Barack Obama, President, United States of America (Mar. 12, 2013), available at http://trade.gov/pec/docs/PEC_Letter10_UNIDROIT_031213.pdf. List of members available at <http://trade.gov/pec/members.asp>.

²⁰² See Letter from Linda Dempsey, Vice President, National Association of Manufacturers, to José Angelo Estrella Faria, Secretary-General, UNIDROIT (Mar. 4, 2013), available at http://www.nam.org/~media/5742E91CFAED47298AC65F2130988B03/CapeTown_Expansion_Final_03_04_13.pdf.

²⁰³ See Letter from Dennis Slater et al., President, North American Equipment Dealers Association, to John Kerry, Secretary of State, United States of America, and José Angelo Estrella Faria, Secretary-General, UNIDROIT (Apr. 2, 2013), available at <http://www.naeda.com/Portals/0/docs/Government%20Relations/Cape%20Town%20Convention%20Letters%20-%204-2-13.pdf>

²⁰⁴ See UNIDROIT, *Item No. 5 On The Agenda: International Interests In Mobile Equipment –(C) Preparation Of Other Protocols To The Cape Town Convention, In Particular On Matters Specific To Agricultural, Mining And Construction Equipment*, C.D. (91) 4(c) (2012).

pressed hesitation.²⁰⁵ At the time of the discussion, the Aircraft, Railway Rolling Stock, and Space Asset Protocols had significantly advanced discussions in the drafting stages, resulting in some carry over and lessons learned. Below is a brief summary of the concerns that were raised in response to the MAC Protocol and an analysis of each raised issue. Section A deals with the MAC Protocol in general. Section B, focuses on how the Protocol would impact small agricultural enterprises. Taken altogether, Section A reveals how, overall, a MAC Protocol, though not impossible or futile, presents many drafting issues and little support.

(i) The Need for a Mining, Agricultural, and Construction
Equipment Protocol

The first pressing issue that UNIDROIT must always consider is the apparent need of a legal instrument within the identified area. It is important to note that UNIDROIT is an international organization with limited funds and increasing demands upon its time. Thus, UNIDROIT, like other organizations, wants to use its resources wisely and not replicate or unnecessarily complicate areas of law that either already exist or are already working well. In the area of MAC equipment, members of the Council expressed concern that a system of domestic financing may already exist.²⁰⁶ However, an extensive study by Heywood Fleisig²⁰⁷ found that financing in many parts of the world is still uncharted or in unenforced legal territory,²⁰⁸ with the author arguing this is especially true as it relates to MAC equipment. And, unsurprisingly, the study found that “lenders are most active in countries where national laws permit use of MAC equipment as the sole collateral for a financing loan.”²⁰⁹

In many instances, especially for those systems most likely to benefit from the Protocol, the use of MAC-based financing is almost nonexistent. The majority of lenders and equipment dealers will not accept mobile equipment as collateral,²¹⁰ regardless of the guarantee of the business owner, unless the guarantee is backed by unencumbered real estate.²¹¹ And

²⁰⁵ For a complete summary, see UNIDROIT, *Item No. 5 of the Agenda: International Interests In Mobile Equipment (A) Implementation And Status Of The Luxembourg Rail Protocol And Of The Space Protocol*, C.D. (92) 5(a) (April 2013).

²⁰⁶ UNIDROIT, *Item No. 5 on the agenda: International Interests in Mobile Equipment – (b) Possible preparation of other Protocols to the Cape Town Convention*, at para. 16, C.D. (92) 5(b) (March 2013).

²⁰⁷ HEYWOOD FLEISIG, *EXTENDING UNIDROIT’S CAPE TOWN CONVENTION TO MINING, AGRICULTURAL, AND CONSTRUCTION EQUIPMENT: ECONOMIC ISSUES*, CENTER FOR THE ECONOMIC ANALYSIS OF THE LAW (Feb. 2013).

²⁰⁸ See UNIDROIT, C.D. (92) 5(b), *supra* note 204, at paras. 17–19.

²⁰⁹ *Id.* at para. 17.

²¹⁰ FLEISIG, *EXTENDING UNIDROIT’S CAPE TOWN CONVENTION*, *supra* note 211, at 3.

²¹¹ *Id.* at 4–5.

since, as discussed above, most farmers in low-income countries rent or do not “own” real property in a manner that creditors recognize as acceptable collateral, they are left without financing options.²¹²

Moreover, the equipment dealers also lack access to financing themselves because their financing arrangements with banks are also only supportable by real estate (even despite lending agreements describing mobile equipment as additional collateral).²¹³ In fact, the lender assumes no value from the mobile equipment²¹⁴ and will, should default occur, derive the full value from the real estate as a primary means of recovery. Ultimately, these constraints cap the amount of lending that can occur to the value of the land.

While it is apparent that many low-income countries do not have adequate legal regimes for asset-based financing despite the need for such regimes,²¹⁵ the larger question is whether the Agricultural Protocol help create such regimes. While it seems that many equipment manufacturers and some governments would resoundingly answer “yes,” there is little evidence that a trickle-down effect will occur, especially in the context of high-value agricultural equipment. In fact, some commentators argue, just as some did with the Space Protocol, that the creation of a MAC Protocol will “create an unnecessary layer of supranational law and that it would raise, rather than lower the costs of financing.”²¹⁶

Moreover, the problems associated with the drafting and the lukewarm reception of both the Railway Rolling Stock and Space Asset Protocols may suggest that the newest Protocols are a step too far for many countries trying to improve access to finance.²¹⁷ The Railway Rolling Stock Protocol can serve as a perfect example of a secured lending regime that can open up private finance, which has ultimately not been widely adopted yet and has instead remained stagnant since completion.

(ii) Value of MAC Equipment as Collateral

The Council expressed concern arising from the repossession value of MAC equipment, asserting the possibility that MAC equipment was less

²¹² Channell, *supra* note 61, at 1.

²¹³ FLEISIG, EXTENDING UNIDROIT’S CAPE TOWN CONVENTION, *supra* note 211, at 4.

²¹⁴ *Id.* at 4-5.

²¹⁵ *See supra* Part I.C.

²¹⁶ An argument that has been advanced may be a hurdle to the adoption of the Space Asset Protocol. *See* Stanford, *supra* note 173, at 111, 169169169

²¹⁷ For example, many in the satellite finance industry argue that the creation of the Space Protocol will do nothing but add regulation to an existing and well functioning finance industry. *See* Staff Writers, *Global Satellite Industry Reiterates Opposition to UNIDROIT Space Assets Protocol*, SPACE DAILY (Feb. 29, 2012), available at http://www.spacedaily.com/reports/Global_Satellite_Industry_reiterates_opposition_to_UNIDROIT_Space_Assets_Protocol_999.html.

valuable as a collateral because it depreciates more quickly²¹⁸ and thus is less likely to be a complete remedy in case of default.²¹⁹ However, based on industry reports, the resale value of MAC equipment, even in small economies, was not seen as a barrier to pledging MAC equipment as collateral.²²⁰

(iii) Appropriateness

Next, the Council members expressed concern that the Fourth Protocol may serve as an inappropriate substitute for a domestic registration regime for two reasons.²²¹ First, they worried that the Fourth Protocol could be inconsistent with domestic regimes and perhaps reduce the incentive for countries without domestic regimes to develop their own secured transactions and registration systems for a variety of other assets.²²² Professor Fleisig's report, however, argued that "[t]he Fourth Protocol would in no sense be inconsistent with possible future domestic reforms . . . [r]ather, it would extend them to international transactions."²²³ Of course, this is true, provided future domestic reforms are designed with the international transactions regime (such as the MAC Protocol) as a guidepost for reform. Yet, there is nothing to ensure that such an event will occur. In fact, if a state undertakes domestic reform at a time when the MAC Protocol is seeing little support, the reforming state might be faced with a difficult choice between using a Protocol that may never come into force as a guidepost or delaying reform efforts until the MAC Protocol is clearly and widely supported.

The dilemma of using *existing* international law as a guidepost for domestic reform efforts prior to widespread support leads many to wonder if *new* forms of international law should ever be used as a guidepost, if, in the end, a reforming system runs the risk of being left with a mismatch of international and domestic legal regimes. Professor Fleisig argues, "[f]ar from replacing domestic reform, a successful application of the Fourth Protocol might advance the cause of domestic reform by giving unreformed countries a firsthand look at how such a system operates."²²⁴ While this is a fair and reasonable assertion, the international legal world is littered with Conventions, Treaties, and similar texts designed to be exemplars that ultimately fail for lack of adoption.²²⁵ When the purpose of an international text

²¹⁸ The US Department of Commerce estimates the life of MAC equipment to be 9–14 years. UNIDROIT, C.D. (92) 5(D), *supra* note 204, at para. 22.

²¹⁹ *See id.* at para. 20.

²²⁰ *Id.* at para. 21.

²²¹ *Id.* at para. 26.

²²² UNIDROIT, C.D. (92) 5(D), *supra* note 204, at para. 27-8.

²²³ FLEISIG, EXTENDING UNIDROIT'S CAPE TOWN CONVENTION, *supra* note 211, at 8.

²²⁴ *Id.*

²²⁵ Consider the e-Commerce Convention, which was designed to replicate U.S. e-commerce law, but has seen few adoptions with most states adopting domestic law instead. U.N. COMM'N ON INT'L TRADE LAW, U.N. CONVENTION ON THE USE OF ELECTRONIC COMMUNICATIONS IN INTERNATIONAL

is to lead by example, “one wonders if international soft law might be a better approach, especially in the area of a secured transaction legal regime.”²²⁶ “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.”²²⁷ 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 European Bank for Reconstruction and Development lawyer Frederique Dahan and economist John Simpson emphasize, the role of those providing technical assistance and support to transition countries is to “assist, not to dictate or impose.”²²⁸ Soft law can accommodate local variances since the legal text offers guidance instead of hard and fast rules.

The second appropriateness concern of the Council arose from the seeming lack of true cross-border mobility of MAC equipment and the infrequency of such activity.²²⁹ These issues give rise to the problems associated uniquely identifying MAC equipment to facilitate an effective system of registration.²³⁰ However, as reported by the CEAL, a substantial amount of MAC equipment does transit borders at least once.²³¹ The CEAL report highlights that MAC equipment may frequently cross borders, although the border crossing often occurs over the life of the equipment and not through daily use.²³² For example, equipment is often manufactured in one country and then transported across a border into a local sale environment.²³³ And of course, the re-sale could also occur after re-export,²³⁴ as markets across a border may be in more need of used²³⁵ or repossessed MAC equipment.²³⁶

While one cross border movement may seem insignificant, a single event that hinders finance may necessitate a resolution within an interna-

CONTRACTS, U.N. Sales No. E.07.V.2. (2007). Another example is the Receivables Convention, again designed in many ways to replicate US law, with few adoptions. U.N. CONVENTION ON THE ASSIGNMENT OF RECEIVABLES IN INTERNATIONAL TRADE, U.N. Sales No. E.04.V.14 (2004).

²²⁶ Professor Fleisig notes, “very few reforms of legal systems for secured transactions have succeeded.” FLEISIG, EXTENDING UNIDROIT’S CAPE TOWN CONVENTION, *supra* note 211, at 32.

²²⁷ Alexander Kern, *The Role of Soft Law in the Legalization of International Banking Supervision: A Conceptual Approach* (Univ. of Cambridge ESRC Ctr. for Bus. Research, Working Paper No. 168, 2000).

²²⁸ Beck, *supra* note 41, at 127.

²²⁹ See UNIDROIT, C.D. (92) 5(b), *supra* note 205, at para. 22.

²³⁰ See *id.* at para. 30.

²³¹ See *id.* at para. 23.

²³² See FLEISIG, EXTENDING UNIDROIT’S CAPE TOWN CONVENTION, *supra* note 211, at 21.

²³³ See *id.*

²³⁴ See *id.*

²³⁵ See *id.* at 22.

²³⁶ See *id.*

tional secured finance regime, such as the Cape Town Convention. But the existence of this issue may impact already existing domestic systems. For example, if a single cross-border event implicates the Fourth Protocol, but the equipment never again crosses a border, one could certainly argue that domestic law is the best way to regulate such domestic activity. As a result, should the Protocol move forward, the individuals drafting it would be wise to recognize and account for this real possibility. Unfortunately, the impact of international law upon a domestic system is an ongoing issue in the drafting of international texts,²³⁷ one that must be navigated carefully.

The international nature of MAC equipment also demands the ability to identify the equipment in a manner that is internationally recognized,²³⁸ but also accommodates the domestic system of registration. As the CEAL report suggests, the lack of an international system of identification could pose problems for several reasons. First, MAC equipment often contains numerous serial numbers.²³⁹ For example, machines that also have a cab will have at least two identification numbers (one for the base machine and one for the cab).²⁴⁰ Second, MAC manufacturers use different numbering systems.²⁴¹ In fact, the manufacturer may have different identification systems amongst the various equipment types.²⁴² Thus, the ability to agree upon the specific identification number, across MAC equipment types, is a major concern. Arguments have been made to use the World Customs Organization (WCO) classification numbers,²⁴³ or similar widely regarded systems.²⁴⁴ The use of this system may not prove efficient, as the change would likely require manufacturers to alter their internal identification systems to match the WCO classifications. However, manufacturers are already familiar with the codes as these are used for tariff treatment.²⁴⁵ The local lenders would also need to become familiar with the methods for specifying collateral. Moreover, the classification codes would likely need to serve as a starting point as some collateral needs more than a generic description, but instead must be uniquely identifiable—something that classification codes likely cannot provide.

²³⁷ Of course, this is especially true in the agricultural area as numerous domestic laws intersect with international law. For example, global environmental law can relate to agriculture in the use and maintenance of international waters, forest resources, and the atmosphere, while importation, land use, and export restrictions can cause issues for the international trade community. *See generally* Hajin Kim, *Do Trade Liberalization and International Trade Law Constrain Domestic Environmental Regulation?* 43 ENVTL. L. REP. 810, 823 (2013).

²³⁸ *See* FLEISIG, EXTENDING UNIDROIT'S CAPE TOWN CONVENTION, *supra* note 211, at 20.

²³⁹ *See id.*

²⁴⁰ *See id.*

²⁴¹ *See id.*

²⁴² *See id.*

²⁴³ For more information, *see Nomenclature and Classification of Goods*, WORLD CUSTOMS ORGANIZATION (Dec. 2013), available at <http://www.wcoomd.org/en/topics/nomenclature.aspx>.

²⁴⁴ *See* FLEISIG, EXTENDING UNIDROIT'S CAPE TOWN CONVENTION, *supra* note 211, at 18.

²⁴⁵ *See id.* at 19.

Finally, an ongoing concern in the development of financing mechanisms arises in the use or influence of a dominant system. Some Council members were concerned that the use of MAC equipment was based on American manufacturers' concerns that may not exist outside of the United States.²⁴⁶ Ultimately, the CEAL report focuses on the limitations to finance that continue to plague many domestic systems. While the source of the influencing law is not fully addressed, it is frequently argued that without reform, systems will continue to be plagued by the well-documented limitations that reduce access to finance in many systems.²⁴⁷

2. Additional Concerns

The above-mentioned concerns were all discussed in official proceedings of UNIDROIT. As can be seen from the discussion, the bulk of it examined the overall importance of the extension. Unfortunately, the majority of the discussion did not focus on smallholder farmers. This section will consider the concerns of this group.

(i) Benefits Exclusively for Large Farms

Smallholder farmers, typically operating as a sole proprietorship (in U.S. based language) often, or exclusively, operate on small profit margins; margins that are greatly reduced when transactional costs of obtaining or securing a loan are high.²⁴⁸ While the Agricultural Protocol will include an international registry, even a low cost registry will still impact transaction costs in two key ways—time and uncertainty. Moreover, from a lender's perspective, smallholder agricultural enterprises are less creditworthy and more risky as they lack formal connections to the wider financial and economic community and have historically been considered "risky" investments.²⁴⁹ Lenders must overcome this risk by requiring greater certainty in information received, monitoring, and control.²⁵⁰ These costs are passed on in bank fees²⁵¹ and of course, in interest rates, something that requires banking and financial regulation. In addition, the informality of smallholder farmers business, such as the unrecorded transactions and lack of legally recognized business structures, causes additional concern for lenders as co-

²⁴⁶ See UNIDROIT, *Item No. 5 on the agenda: International Interests in Mobile Equipment – (b) Possible preparation of other Protocols to the Cape Town Convention*, *supra* note 210, at para. 25.

²⁴⁷ See *supra* Part III.C.

²⁴⁸ See Thomas Engelhardt and Benjamin Regitz, *The State of Nature and Lending in an Unreformed Environment: Experience from Early Transition Countries*, in SECURED TRANSACTIONS REFORM AND ACCESS TO CREDIT 141 (Frederique Dahan & John Simpson eds., 2008).

²⁴⁹ Jessop et al., *supra* note 50.

²⁵⁰ See Engelhardt & Regitz, *supra* note 252 at 146.

²⁵¹ See *id.*

operatives, group share networks, and similar strategies may place both the willingness to repay and the physical condition of the collateral in question.

These situations cannot and will not be addressed within the Agricultural Protocol. Large agricultural enterprises, with fixed locations, larger work forces, and greater financial and community connections may benefit from improvements like the creation of a registry. However, these same benefits will not trickle down to smallholder farmers. Instead, the market will respond to the less risky lending of a larger enterprise and may struggle to find the will, the energy, or the profit motive to reach into the less creditworthy smallholder enterprises.

Furthermore, even with the protocol, banks will still be unwilling to deliver service to smallholder farmers. Distant, isolated, and dispersed populations, and a poor road and energy infrastructure make it difficult and expensive for financial institutions to open branches in rural areas to serve and monitor clients. In addition, due to rural poverty, the market size for smallholder loans is small, and so are the individual loans, savings accounts, and payment transactions. Farmers tend to be unable (or unwilling) to pay a price for financial services that match the real transaction cost and risk (interest rates usually of at least 15% per year).²⁵²

The negligible impact the Agricultural Protocol would have on smallholder farmers should be a serious concern in light of the large role that smallholder agricultural enterprises play in the reduction of food scarcity.

(ii) The Failure to Include Small Farming Equipment

As previously noted, well over a majority of the states that responded to the original UNIDROIT survey noted that greater facility in obtaining credit for smaller equipment would be beneficial.²⁵³ However, small equipment financing would not fall within the scope of the Cape Town Convention or the Agricultural Protocol.²⁵⁴

While it is true that small agricultural enterprises need high value equipment, such as harvesters, the vast majority²⁵⁵ of farming enterprises are in the hands of single farmers. As discussed previously, the overwhelming majority of these farmers farm less than two hectares.²⁵⁶ Small equipment is a must for many of those in the best position to assist in the food scarcity issue. Yet, an agriculture-focused international instrument will not encompass those in the greatest need. Large-scale agricultural enterprises

²⁵² Jessop et al., *supra* note 50, at 24.

²⁵³ See UNIDROIT C.D. (90) 4(c) para 3, 4 and 9–Annex 1, 15 (2011).

²⁵⁴ See generally. The Council did note that this issue should be explored in a separate document in the future. See *id.* at para. 15.

²⁵⁵ See *id.* at 13.

²⁵⁶ See Nwanze, *supra* note 9.

also have access-to-finance issues.²⁵⁷ However, the exclusion of agricultural equipment based on cost, when not excluding equipment based on the “international” criteria, is an odd decision. This was similar to an issue that was raised during the Aircraft Protocol’s initial discussion: how should the Protocol account for small aircraft used for personal short duration and journey flights? Ultimately, these aircraft are a continuing point of contention as the Protocol applies to aircraft based on size and power requirements of the aircraft.²⁵⁸

The concern is that a Protocol, designed to stimulate the purchase of large, commercial aircraft by airlines and commercial operators, has instead over-captured many small aircrafts unnecessarily.²⁵⁹ One wonders if the Agricultural Protocol will not suffer from the same criticism by arbitrarily creating designation and divisions between small equipment and large equipment. Moreover, and this cannot be emphasized enough, it is the small agricultural enterprises in the greatest need—there is no real reason to exclude coverage based on size, power, or cost.

(iii) The Lack of Time

In spite of all the arguments for and against the extension of the Cape Town Convention to include a Mining, Agricultural, and Construction Equipment Protocol, there is one additional implementation detail that needs to be given the greatest attention: time. Professor Fleisig highlights: “high quality reform such as the Fourth Protocol would produce benefits much sooner (than other alternatives). Smaller benefits now can be economically more important than larger benefits later, especially when ‘later’ is not in sight.”²⁶⁰ Unfortunately, secured transactions reform, especially international harmonized texts, has seen more than its share of failures. From Legislative Guides,²⁶¹ to Model Laws,²⁶² to Conventions,²⁶³ the internation-

²⁵⁷ The Fleisig list is not focused on agriculture and does not distinguish between small, medium, and large enterprises. *See generally* Beck, *supra* note 41 (discussing the need for inclusive financial systems with examination of differentiations in development and GDP).

²⁵⁸ Aircraft meet the minimum size requirements when they are certificated to transport at least eight persons (including crew) or goods in excess of 2,750 kilograms. *See e.g.*, Thomas E. Gillespie and Robert S. Hill, *United States: Cape Town Convention Changes Rules of Aircraft Purchase and Finance*, JONES DAY (June 2006), <http://www.mondaq.com/unitedstates/x/40202/cycling+rail+road/Cape+Town+Convention+Changes+Rules+of+Aircraft+Purchase+and+Finance>.

²⁵⁹ *See id.*

²⁶⁰ FLEISIG, EXTENDING UNIDROIT’S CAPE TOWN CONVENTION, *supra* note 211, at 8.

²⁶¹ *See, e.g.*, U.N. COMM’N ON INT’L TRADE LAW, *supra* note 229.

²⁶² For example, the EUROPEAN BANK FOR RECONSTRUCTION AND DEVELOPMENT, MODEL LAW ON SECURED TRANSACTIONS (2004) (which has seen reasonable success); Boris Kozolchuk and John M. Wilson, *Organization of American States’ Model Inter-American Law On Secured Transactions* (2002) (also with reasonable success); U.N. Commission on International Trade Law, *Draft Model Law on Secured Transactions*, U.N. Doc. A/CN.9/WG.VI/WP.57 (Sept. 16, 2013).

²⁶³ *See, e.g.*, U.N. CONVENTION ON THE ASSIGNMENT OF RECEIVABLES IN INTERNATIONAL TRADE,

al community seems to find some of its greatest drafting battles fought in the drafting of a secured transactions regime.²⁶⁴ Furthermore, developing and implementing a useful text is only half the battle; the usefulness of collateral in securing a loan depends on the certainty and speed of enforcement and the ease of repossession. Getting the appropriate court order is often a complex and lengthy process, which needs to be addressed by governments.

Private investment and financing is key to agricultural development, and in order to boost such investment, a favorable environment must be created. Unlike other sectors such as education or health, which deal essentially with public goods, the actors involved in the agricultural sector (farmers, agribusiness, service providers to agriculture, etc.) are mainly private parties.²⁶⁵ Financial institutions simply will not lend to smallholders if they cannot be secure in their investments;²⁶⁶ therefore, large-scale reforms to the legal environment are absolutely necessary.

The food scarcity issue is real and the time of real crisis is quickly approaching. There is little doubt that agricultural enterprises, both large and small, will need to increase food production, even if the population stays stable.²⁶⁷ In many countries, smallholder farms are the only real means of overcoming a serious food crisis in the short term.²⁶⁸ Regrettably, it appears that the Agricultural Protocol might be the only means to quickly introduce secured transactions reform into the highly important asset category of equipment. Yet, there is little indication it will succeed and even less belief that it will truly improve access to finance to small agricultural enterprises.

supra note 229.

²⁶⁴ The United Kingdom has struggled mightily with these issues, especially as the United Kingdom's Personal Property Law is thought by many to be a world leader. *See e.g.* THE REFORM OF UK PERSONAL PROPERTY SECURITY LAW, COMPARATIVE PERSPECTIVES (John De Lacy ed., 2010). As highlighted by Professor de Lacy, "English law (of personal property security interests) is stuck in a time warp." De Lacy, *The Evolution and Regulation of Security Interests Over Personal Property in English Law*, in THE REFORM OF UK PERSONAL PROPERTY SECURITY LAW, COMPARATIVE PERSPECTIVES 81 (John De Lacy ed., 2010). In fact, Professor Gerald McCormack highlights, "for thirty years successive official bodies and government reports have endorsed the idea of reforming the English law of personal property security. . ." Gerald McCormack, *Pressured by the Paradigm: The Law Commission and Company Security Interests*, in THE REFORM OF UK PERSONAL PROPERTY SECURITY LAW, COMPARATIVE PERSPECTIVES 83 (John De Lacy ed., 2010).

²⁶⁵ In fact, in the United States the numbers are incredibly high. For example, in Oregon alone the numbers reflect a full 85% of agricultural enterprises are operated by sole proprietorships and less than 2% operating as non-family corporate entities. *See Agriculture*, OREGON BUSINESS PLAN, <http://oregonbusinessplan.org/Industry-Clusters/About-Oregons-Industry-Clusters/Agriculture.aspx> (last visited Feb. 2, 2014).

²⁶⁶ Stemler & Raymond, *supra* note 6, at 286.

²⁶⁷ *See supra* Part I.

²⁶⁸ *See supra* Part I.A.

(iv) Baby Steps Will Not Work

As discussed extensively above, smallholder farmers need access to finance.²⁶⁹ It is not the case; however, that equipment is the only need,²⁷⁰ nor will the secured transactions regime covering large equipment, and equipment alone, open up anything other than access to equipment.²⁷¹ Assuming the financing of equipment through this Protocol is successful, it is still not enough to impact the food scarcity issue. And while the endeavor might end up being a successful one, it is still just a baby step toward the stated goal of reducing the food crisis that is looming. In this case, the time of drafting, the need to wait for the trickle-down effect, and the uncertainty of the larger secured transactions regime, makes this baby step much too small.

IV. CONCLUSION

While one should certainly applaud the efforts of UNIDROIT and support its intentions to reduce food scarcity, the extension of the Cape Town Convention is not the best use of its limited time and resources. The Agricultural Protocol will be difficult to draft as the nature of the equipment is fundamentally different from the other Protocols. Most concerning is the absence of a truly cross-border movement that demands an international legal text. Presuming that a text can ultimately be drafted, the Protocol stands a narrow likelihood of successful adoption. The last two Protocols continue to have limited impact in their respective asset areas and neither looks likely to be in force any time soon. Finally, assuming all of this can be overcome, the Agricultural Protocol will have no measurable impact upon the needs of small agricultural enterprises—the main entities that will impact the food crisis in key regions of the world. Pretending differently does not change the fact that the Protocol will benefit those enterprises in a position to successfully accommodate such a financial system: the large agricultural enterprises.

Swift action is needed in this time of scarcity. We should demand UNIDROIT put its resources to better use. If international entities like UNIDROIT want to impact the food crisis, they should identify one of the many international instruments that would truly help small agricultural enterprises and tackle those issues. Issues such as improving smallholder finance, contract farming, food resources, and other financial enterprise work are ripe for discussion and international harmonization. Cramming yet another asset category into a Convention that looks to be better left to aircraft will not impact the food scarcity issue at all. Instead, it will focus necessary

²⁶⁹ See *supra* Part I.B.

²⁷⁰ See *id.*

²⁷¹ See *supra* Part IV. 1, 2

resources into the wrong area international legislative bandwidth could be put to a much better use.

Appendix A: Low-Income Economies²⁷²

Afghanistan	Kyrgyz Republic
Bangladesh	Liberia
Benin	Madagascar
Burkina Faso	Malawi
Burundi	Mali
Cambodia	Mozambique
Central African Republic	Myanmar
Chad	Nepal
Comoros	Niger
Congo, Dem. Rep	Rwanda
Eritrea	Sierra Leone
Ethiopia	Somalia
Gambia, The	South Sudan
Guinea	Tajikistan
Guinea-Bissau	Tanzania
Haiti	Togo
Kenya	Uganda
Korea, Dem Rep.	Zimbabwe

²⁷² WORLD BANK, *supra* note 5.