

# **Helping People Help Themselves through Community Supported Agroforestry-based Learning**

by

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Many people in many places have contributed to this progress report: leaders of organizations that are past, present and future partners of WILMA, colleagues from my past careers in the IMF and World Bank, experts in my newly-chosen focus on sustainable agroforestry as the future silver bullet of rural development and environmental restoration everywhere, educators who see WILMA as a future ally in their own crusades, the founders of WILMA and fellow board members who provided the diverse experience and expertise needed to get traction on the ground in Africa, and members of the Armington family whose charitable fund and individual contributions in money and advice have kept WILMA going to this date. So, while this document is presented as a narrative written in the first person, I do not regard it as my finished product. Indeed, contrary to the practice of attribution in owned intellectual property, I do not “take responsibility for any remaining errors” because this would violate the higher principle of collective ownership that is central to the development strategy recommended here. After all, this is a “work in progress,” and probably there are errors and indiscretions in it. Those who read this and find them are invited to inform me at [parmington@wilma.us](mailto:parmington@wilma.us) .

Paul Armington, February 2015  
President of WILMA

## Foreword

This monograph presents the experiences—and travails—of a group of committed development experts who spent 15 years working on pilot projects aimed at building capacity for leadership and management of development in Sub-Saharan Africa. The group, mostly with World Bank experience, invested their time and personal resources to work toward the lofty goal of “getting Africa out of the poverty business.” The monograph is presented as a personal narrative of the leader of the group, for whom this goal has become a consuming passion. Its conclusion summarizes what he thinks he has learned from the effort and why he thinks there are good prospects for achieving the goal.

The task of “helping people help themselves” in a sustainable manner proved more difficult and challenging than even these highly skilled and committed development professionals expected. The skills of the local people (mostly poor farmers), as well as the local governments’ technical and administrative capacities, were limited, and the severe financial constraints the projects faced made it nearly impossible to build capacity and sustain their efforts beyond the pilot period. These problems are familiar to anyone who has worked on projects of this type. What is interesting are some of the insights the author offers:

- Leadership is the scarcest form of human capital needed for capacity building projects, but “followership” is crucial to validate leadership.
- The lag between an intervention and eventual results on the ground can be long and well beyond a project’s completion date (thus the requirement for more financing).
- Global know-how can now be applied to solve local problems in new ways—perhaps more quickly and efficiently than ever before—through, for example, the internet and social media.
- Project management and implementation should be based on well-understood and proven incentives compatible with and governed by the behavioral economics that is based on the local setting and cultural norms. While, in general, beneficiaries should be required to pay for services they receive from the outside donors, there might be circumstances when the very poor need to be paid to utilize a service (e.g. immunization, sending their children to school etc) under various forms of conditional cash transfer program. However, to support and preserve the incentive system, lump sum money—the “root of all evil,” according to the author—should not be handed out unconditionally under most circumstances.

The author concludes that investing in people’s capacity to lead has outcomes that are difficult to discern in the short run. He asks whether this insight validates WILMA’s present initiative to create Community Supported Agroforestry-based Learning (CSAL) Programs. These programs seek to improve the social order, economic justice, and democratic governance in developing and advanced economies alike through a virtual organization of scientists, educators, agriculturalists, economists, mentors of youth, and others who want to create opportunities for research, study, entrepreneurship, and careers in the interlocking disciplines of agroforestry.

In the CSAL business model, schools, cooperating with other nonprofit organizations with an interest in improving education, create a CSAL program to benefit their local area. An interested group of schools forms a local area school league. These schools and others that become affiliated with a CSAL program serve as leaders of learning who gather, distill, share, and use

information. The schools produce data and other findings from local field applications of agroforestry that can benefit poor people—and potentially enhance or even inform genomic research in the world’s leading research laboratories. Practical lessons will be learned from both failure and success in all aspects of field operations, with these lessons finding their way into the education products of CSAL–affiliated schools. The hope is that these products could include facilities and opportunities for educators, interns, and volunteers; a living laboratory for distance education and electronic classrooms; websites that provide free access to papers written by people associated with participating schools; and teaching modules on new environmental science for integration with existing classroom and distance-education courses. The global CSAL network—experts who learn from experience in working with CSAL Programs—would make these education products readily available to people throughout the world who need them.

The idea is both transformational and implementable, particularly given advances in communications technology. But it can be realized only if it attracts a few benefactors who would see it as an efficient and cost-effective way of doing something that would benefit a large number of people around the world to become more self-reliant and less dependent on outside aid. With the help and support of the proposed global network of experts, successful pilots in one setting could be readily adapted for different settings and then scaled up.

The need for something like this is critical. Economic growth pulled hundreds of millions of people out of extreme poverty over the past quarter century, but more than a billion people still live in extreme poverty (defined by the World Bank as living on less than \$1.25 a day)—what Paul Collier calls the “bottom billion.” Another billion are barely above the poverty line. This kind of poverty is not limited to poor countries. In fact, more than two-thirds of the world’s people living at or below the extreme poverty live in middle-income countries, including emerging economies such as Brazil, China, and India.

Economists have come up with (very different) grand theories about how to reduce poverty. Jeffrey Sachs, of Columbia University, thinks that the solution is more aid. Bill Easterly, a former World Bank research economist now at New York University, deems foreign aid a waste of resources. Dambisa Moyo, a best-selling author and former consultant to the World Bank and Goldman Sachs, supports a philosophy of “trade, not aid.” Paul Romer, the director of the Urbanization Project at New York University, believes the key is establishing “charter cities.”

Abijit Banerjee and Esther Duflo provide fascinating insights into the decision-making processes of the extreme poor. In *Poor Economics: A Radical Rethinking of the Way to Fight Poverty*, they critique the big antipoverty strategies dominating international development and document the lived experiences of the poor. They show the importance of taking into account the adaptive behavior of the poor when crafting policy for poverty reduction. Their book provides important and refreshing insights about what works and what does not and why in antipoverty projects.

Some of their insights are consistent with what Armington and his co-authors found in Sub-Saharan Africa. For example, Banerjee and Duflo argue that paying people can save money. The idea of sustainability is often interpreted to mean that people should pay for what they receive, even when the goods or services provided have large externalities. But experiments show that under some circumstances, it is better to pay people than to charge them. The cost of immunization, for example, was lower when mothers were paid (in lentils) to have their children vaccinated than when a reliable NGO was used to deliver immunization free of charge.

Failure to recognize how incentive structures differ across contexts has limited utilization rates for certain antipoverty efforts, rendering them ineffective. Understanding the cultural context and incentive system helps make sense of seemingly irrational behaviors, such as buying television sets rather than more food and other necessities, borrowing money from loan sharks rather than banks, and using costly unnecessary drugs while failing to take inexpensive preventive health care measures.

This monograph was written mainly for readers committed to helping developing countries (and the poorer areas of advanced economies). It will be of interest to a broad audience of decision makers, researchers, and stakeholders who want to help build leadership capacity to stimulate and manage inclusive and sustainable development.

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## Preface

The late Dunstan M. Wai, to whom this personal narrative is dedicated, taught me his African spirit and convinced me that building local capacity for *leadership and management* is the key to helping Africa become all that it can be. Discovering what this means and how to do it has been my goal since 1999, when I left Wai's Capacity Building Unit of the World Bank's Africa Region to set up WILMA, the felicitous acronym of World Institute for Leadership and Management in Africa. During these years the Bank has made progress in this direction, particularly through its Community Driven Development (CDD) program.<sup>1</sup> Yet the local capacity required for effective use of outside resources, such as those that CDD can well provide, remains scarce. Thus, as the Bank's own research shows, results for poverty alleviation especially in the long run fall short of expectations of the outside funders and managers of these programs emphasizing "community participation."<sup>2</sup>

Solving David Ellerman's conundrum of "Helping people help themselves" (see Chapter 1) seems to require a different approach to capacity building, one that appreciates "...how humans think (the processes of mind) and how history and context shape thinking (the influence of society) can improve the design and implementation of development policies and interventions that target human choice and action (behavior)."<sup>3</sup> To what "mental model" does this appreciation of "how humans think" lead us, if our goal is alleviation of endemic poverty? My quest for this new "mental model" is the subject of the following narrative. The model that emerges through these four chapters has not yet been shown to be feasible, but testing it is starting both in Africa and elsewhere, and the process of learning is open to all. I am joined in this quest by my colleagues in WILMA, including Wai in spirit, and by likeminded individuals in Africa and around the world who have been part of my odyssey in "retirement."

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<sup>1</sup> See <http://www.worldbank.org/en/topic/communitydrivendevelopment/overview> .

<sup>2</sup> See <http://www.intrac.org/data/files/resources/250/Mansuri%26Rao%202004.pdf>

<sup>3</sup> Quoted from the Overview of the World Bank's World Development Report for 2015, titled *Mind, Society, and Behavior*. The conclusion is that "...development policy is due for its own redesign based on careful consideration of human factors." See

<http://www.worldbank.org/content/dam/Worldbank/Publications/WDR/WDR%202015/Overview-English.pdf>

## Acronyms

Acronyms are the variables and constants of the mental model presented in this document. A list of them makes a kind of summary. See also the brief introductions beginning each chapter.

**WILMA = World Institute for Leadership and Management in Africa**, a Private Foundation registered in 1999 in the District of Columbia, USA.

**CSAL = Community Supported Agroforestry-based Learning**, the name of WILMA's current program for comprehensive development of a local area having a CSAL Program.

**LASL = Local Area School League**, a group of cooperating schools in this local area that participate and contribute to this CSAL Program in return for various benefits.

**SLEN = Sustainable Local Enterprise Network**, a networked group of organizations in this local area that, while engaged in commercial enterprise, embrace working relationships with NGOs having common interests in the goals of the CSAL Program.

**NGOs = Non-Governmental Organizations**, private groups having a development purpose, which may be structured as not for profit, for profit, or for benefit companies.

**JVCE = Joint Venture Commercial Estate**, a business like an industrial park, but adapted to rural conditions, that creates and supports on its own land a portfolio of synergistic commercial enterprises. A JVCE is structured as a joint venture of providers of land, services, and capital.

**SEIC = Social Enterprise Incubation Center**, like a JVCE but not dependent on ownership of land as the convening resource, providing comprehensive incubation and business development services to "social enterprises" (a.k.a. triple-bottom-line companies), including MPE finance.

**MPE = Micro Private Equity**, private equity finance for early-stage qualified clients of an SEIC, fitting their needs, i.e., equity participation that is timely, of proper scale, patient, and protective of the interests of the founding entrepreneurs of CSEs.

**CSE = Community Supported Enterprise**, an enterprise that qualifies to be a client of the services of an SEIC, which in a normal growth path becomes an investee of an MPE fund.

**AILC = Agroforestry Innovation Learning Center**, an SEIC with a focus on innovation and learning in agroforestry, structured as a for benefit corporation (B-Corp in US law) whose Business Development Services program creates an investment-grade pipeline of IDEAs.

**IDEA = Innovation Driven Enterprise in Agroforestry**, a business concept that has the potential to monetize advances in agroforestry science, creating a future profit stream that benefits the founding entrepreneurs of resulting CSEs and all their community stakeholders.

**CIT = Community Investment Trust**, an endowment fund for MPE finance of CSEs with good IDEAs. The Trust is invested for the long-term benefit of the local area served by this CSAL Program. It is capitalized by grants from both local and outside donors. While being a branch of the AILC, it is governed by an independent Board of Trustees and is professionally managed.

**LICR = Local Initiative, Control, and Responsibility**, the capacity for leadership of CSAL Programs that is both the scarcest resource and the most essential for action.

# Chapter 1

## Learning How To “Get Africa Out of the Poverty Business”

*Introduction: Starting from their limited experience in the World Bank, the founders of WILMA have been seriously challenged over the past 15 years to solve David Ellerman’s conundrum of “Helping People Help Themselves.” But Africa has been a good testing ground for innovative thinking, which has evolved in several stages of trial and error. In the final stage, discussed here, there is great hope for the future.*

### Starting Transformative Social Change

On the premise of improving social order, economic justice, and democratic governance in the world, I am joining an international network of experts called the Global CSAL Network, where **CSAL is an acronym for Community Supported Agroforestry-based Learning**.<sup>4</sup> The term agroforestry refers to integrated ways to combine trees and shrubs with crops and livestock to increase the value of marginal land to benefit a diversity of life.<sup>5</sup>

This Network is envisaged as a virtual organization of individuals whose interests and expertise can contribute to the mission of Community Supported Agroforestry-based Learning (CSAL): scientists, educators, agriculturalists, economists, mentors of youth, and others who wish to create opportunities for research, study, entrepreneurship, and lifetime careers in the interlocking disciplines of agroforestry. The associates of this Network believe that many students and teachers with ambitions to lead social change will be choosing this study area as fundamental to surmounting the major plights of our planet, namely the interconnected problems of food, energy, water, and climate change, in addition to jobs and income. By building a global virtual organization of experts in the areas of business, forestry, agriculture, engineering, agro-ecology, marketing, and related fields referred to as permaculture, the Network envisages a growing capacity for community progress at the most local level through (a Network slogan) “learning integrated with earning.”

CSAL is an interest of my organization, WILMA, whose broad objective is “Getting Africa Out of the Poverty Business “ (as documented at [www.wilma.us](http://www.wilma.us) ). **The CSAL concept is now being elaborated into business plans for implementation in particular ecosystems**, such as the District of Karagwe in Tanzania, the region of Ranomafana in Madagascar, the coastal area of southern Rhode Island, and the Potomac Highlands of West Virginia (USA). **The present monograph is intended in part to serve as a background paper for such plans, outlining the concept and strategy of CSAL.**

Its origin, however, was an arduous and costly process of experiment and learning that began with the founding of WILMA Inc. in 1999 by the late Dunstan M. Wai and some of his colleagues whose experience was largely in the World Bank. A major part of WILMA’s

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<sup>4</sup> For notes about the present associates of the Global CSAL Network, see <http://wilma.us/docs/CSAL-Network-Biographical-Notes.pdf> .

<sup>5</sup> For a definition and evaluation of agroforestry, see <http://en.wikipedia.org/wiki/Agroforestry> and USDA’s National Agroforestry Center webpage <http://nac.unl.edu/#about> . The term agroforestry is commonly used in programs designed for less developed countries. In more developed countries a similar strategy for the use of land is called *permaculture*, a word derived from permanent agriculture. See <http://en.wikipedia.org/wiki/Permaculture> .

intellectual foundation was David Ellerman's book, *"Helping People Help Themselves: From the World Bank to an Alternative Philosophy of Development Assistance (Evolving Values for a Capitalist World)"*, which he completed while being a Senior Advisor in the World Bank. The essence of "helping people to help themselves" is building the capacities of local leadership that is motivated to take initiative, control, and responsibility for innovation in social change. This has proven to be a difficult challenge, especially in relatively remote, tradition-bound rural areas of Africa whose communities could benefit most from outside assistance. This chapter summarizes WILMA's experience so far.

### **A Brief History of WILMA's Experience**

WILMA's learning process exemplifies the interaction of fast and slow thinking discussed by the Nobel Prize winner in economics, Daniel Kahneman, in a book of this title.<sup>6</sup> The fast part was absorption of concepts and impressions from Africans and others who volunteered their long experience and apparent wisdom, then composing this input as a mental model to guide a program of work. The slow part was actually working, raising some money, focusing on the details in a concentrated manner, and so finding out why that model needed fixing. As with Igor Sikorsky and his helicopter, there were crashes along the way, but the pilot survived to entertain another round of fast impressions, and hence more slow thinking.

This churning process has been documented by a series of websites that were designed and maintained by Mr. David Laughton, WILMA's IT manager who has also written entertainingly about WILMA's experience in Africa during its early years, 2000-2004 ([www.laughton.org](http://www.laughton.org), David's page). These websites provide lessons of learning from both success and failure in trying to build capacity for leadership and management in Africa (WILMA's focus). One finding is that investing in people's capacity to lead has outcomes that are difficult to discern in the short run. The lessons have motivated us to re-think our processes, resulting in successive "mental models." Is CSAL the end result? Maybe so, but this will depend on whether its practitioners succeed — "proof of the pudding", which will take time.

File [www.wilma.us/archive2](http://www.wilma.us/archive2), dated 2005, provides a comprehensive look at WILMA's values, principles, purposes, and processes concerning community-based development. Archive1 dealt with WILMA's initial stage as a catalyst for creating National Leadership Institutes led by famous statesmen, a task that produced some quick results, but then we became convinced that a "bottom-up" approach to capacity building, helping leaders of local communities to succeed, would be more productive in the long run. Archive2 describes WILMA's program through 2004 and the network of organizations that was set up to implement its program (see "Our Network" page). The financing mechanism for this program was called WilmaFund, a non-profit company limited by guarantee and registered in Tanzania in September 2003. WilmaFund was conceived to be the first African Community Development Finance Institution, a new type of institution then expanding rapidly in the USA and UK.<sup>7</sup> The page of this website labeled "Ventures in 2004" lists a pipeline of community-supported "social enterprises" in which WilmaFund was

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<sup>6</sup> Daniel Kahneman, *Thinking, Fast and Slow*, 2011.

<sup>7</sup> For general information on CDFIs, see [http://en.wikipedia.org/wiki/Community\\_development\\_financial\\_institution](http://en.wikipedia.org/wiki/Community_development_financial_institution).

preparing to invest when “patient capital” became available from outside investors and donors such as the World Bank.<sup>8</sup>

WILMA made an extensive and costly effort in 2005 to raise many millions of US dollars in low-cost loan commitments, sought largely from the World Bank and other long-established U.S.-based development agencies, public and private. This effort failed, while I nearly got duped by an offshore money-laundering scheme that promised easy access to capital for would-be do-gooders. To potential donors WILMA’s principles regarding self-help and local autonomy seemed risky and inconsistent with prevailing views in aid agencies about what Africans in rural villages could be expected to manage. WilmaFund’s own Board (of mainly Africans) did not raise money, lacking cohesion as a group representing several countries and diverse agendas. WILMA’s National Managing Partners, all organizations short of cash for their own core programs, did not raise money, either. WILMA’s capacity to provide seed money waned, having been fed largely by a family foundation. So, despite some successes in helping local partners to start community-based social enterprises, none achieved sufficient scale to survive and grow through their own profits. In 2008, lacking cash to sustain its office and operations in Dar es Salaam, WilmaFund liquidated its modest assets and effectively ceased operations. The WILMA Network in several countries, all depending on top-down cash flow from WILMA, gradually dissipated.

This crash of the WILMA helicopter in an overhaul of its financing strategy is described in [www.wilma.us/archive3](http://www.wilma.us/archive3), dated 2007. A new mental model, called the Joint Venture Commercial Estate (JVCE), was summarized in the page titled “Getting Africa Out of the Poverty Business”. WILMA’s new search for financing was influenced by Professor C.K. Prahalad’s advice to multinational companies to “find their fortune at the bottom of the pyramid”. This thinking about the potential for Community Based Organizations to partner with large-scale commercial companies resulted in a proposal called the WILMA Business Ecosystem for Africa. Henceforth WILMA would work with "nodal firms" of corporate networks having the common goal to transform the lives of the poor (better called the "underserved") while building their supply chains and their markets for “Fast Moving Consumer Goods.” The business structure proposed was the Joint Venture Commercial Estate (or JVCE), which WILMA conceived as the counterpart in Africa to the Joint Venture Industrial Parks model being promoted by WILMA’s first for-profit partner in development, Tucson Transatlantic Trade Holding Group Inc. JVCEs would be designed to enable the use of marginal land to locate community-based clusters of profitable enterprises, within a legal and financial framework designed to attract socially-responsible investment partners worldwide. As stated on the page titled WILMA Business Ecosystem for Africa, “the nodal firm of a WILMA business ecosystem for Africa is preferably an African subsidiary of a multinational company that owns, together with WILMA, half of a Community Enterprise Corporation. This Corporation is structured as a joint venture with national and local (including community-based) entities that collectively own the other half of the equity... JVCEs, planned, incubated, and partly financed by Community Enterprise

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<sup>8</sup> For an overview of the World Bank’s strategy, as it was developing around 2005, for funding agricultural innovation systems in cooperation with private partners, see “Agricultural Innovation Systems: An Investment Source Book,” available here: <http://siteresources.worldbank.org/INTARD/Resources/335807-1330620492317/9780821386842.pdf>.

Corporations with ground-level partners, are the community-based elements of any WILMA ecosystem.”

In 2008 WILMA began to try to engage potential partners in JVCEs, e.g., in biofuel, water filtration, solar electric power, solar cooking equipment, construction, malaria control, and security systems, all based on infusions of innovation from abroad and motivated by technology supply-push. Soundings in African NGOs registered general enthusiasm for the JVCE concept, although this did not imply willingness to spend much of their own money to implement it. Leaders of WILMA-supported Community Development Associations, which were using small grants from WILMA to capitalize their micro-finance operations, were enthusiastic about the idea of clusters of innovative businesses benefiting from being gathered on a large tract of land, while collectively benefiting the residents of its local area. So WILMA looked for ways to find lands that these Associations could use permanently to create JVCEs that they would partly own. Given WILMA’s good relations with ground-level partners and its emphasis on LICR (Local Initiative, Control, and Responsibility), access to land at least in small tracts did not appear to be a serious barrier to progress, especially if contributed by villages, schools, churches, other NGOs, or traditional authorities.

But secure, long-term access to large tracts of land for JVCEs did become an apparent barrier to progress, especially for rural businesses practicing sustainable agroforestry such as biofuel. WILMA could not find any “nodal firm” that would pay the costs of securing a minority holding in a Community Enterprise Corporation, which would be designed to plan, incubate, and partly finance JVCEs. The perceived risks of delays and controversy over control of land by outsiders appeared to be the main barrier to progress. So the idea of using land as the main basis for synergy within clusters of profitable enterprises benefiting the local area was abandoned. In short, that model of WILMA’s helicopter had a fatal flaw.

**WILMA then focused on the practical education of social entrepreneurs and the creation of scalable social enterprise as the outcome of their learning.** This philosophy was described in its next website, [www.wilma.us/archive4](http://www.wilma.us/archive4) dated 2012. The joint venture structure was now called a Social Enterprise Incubation Center, or SEIC. The updated website announced, “The mission of SEICs is to contribute to sustainable development in rural areas by empowering entrepreneurs to invest in the full use of local human, social and natural resources through establishing profitable businesses that benefit their local areas. These high-return businesses will usually be linked economically with large-scale investments in natural resources (energy, water, mining) as well as transport, telecommunications, food processing and related sectors that are basic to the quality of life. SEICs will be structured as Joint Ventures with companies making these large-scale investments and will return capital to their owners.”

While this modified strategy focused on increasing the motivation of private investors to invest for profit and of public donors to give to support them, it retained the assumption common to the programs of aid agencies that the basic driver is the flow of money from the Top of the Pyramids (of both public and private organizations in the business of development finance) to the Bottom of the Pyramids (ground-level commerce and community services). The diagram of this model (the page of [www.wilma.us/archive3](http://www.wilma.us/archive3) titled Vision for SEICs) depicts all the participants in these flows of money, cooperation, technical support, bilateral exchange, and local leadership. This diagram suggests why and how this system could work by being incentive-consistent in its many parts, with the engine of ignition fueled by the Development Finance Institutions (upper-right-

hand box of the diagram). Naturally, WILMA's partners on the ground in Africa enthusiastically awaited the creation of SEICs. However, the fatal flaw in this model was that WILMA had no way to start the engine running, and moreover she was concerned that such reliance on outside money to start the engine would never induce Africa's leaders to "Get Out of the Poverty Business." In short, that mental model was still hooked on a mindset of aid dependence that needed to change.

**So WILMA's challenge of helping the poor to help themselves continued with an exploration of whether private equity capital, suitably scaled and motivated to fit with the SEIC concept, might fill the need for early-stage financing of ground-level rural businesses in Africa.** Being a for-profit distillation of capitalism, and also capable of adopting social goals (depending on its investors' agendas), private equity seemed to be a potential source of finance for social enterprises that are clients of SEICs. Standard private equity funds around the world were having great success and beginning even in Africa. The received wisdom was that their assets under management should be in the hundreds of millions of dollars, given the costs and risks. Such scale being evidently inconsistent with local autonomy, WILMA invented an idea called Micro Private Equity (MPE). The idea was to see if smaller scale funds ("micro" meaning less than \$100 million) could work. WILMA's advisers and consultants developed a mental model for MPE finance and explored its potential in Tanzania, where WILMA had good connections to test the concept. The findings were not encouraging. While wise men and women everywhere endorsed the concept, existing financial institutions were not positioned to invest in an MPE fund for Tanzania. However, these institutions could be part of a broader program that would mitigate their risk, reduce their costs, and increase their incentive to be part of a process benefiting their country.

Thus, WILMA, continuing her search, launched the proposal described in the present website, [www.wilma.us](http://www.wilma.us). **The sectoral focus was narrowed to agroforestry, which is practical for many reasons: health, food security, sustainable water and energy, preserving biodiversity, dealing with climate change. The emphasis on investing in the rural economy and its infrastructure continued.**

Once again the names have changed but the concepts have been modified only slightly. SEICs are now called AILCs, **short for Agroforestry Innovation Learning Centers.** Like SEICs, **AILCs invest a mix of private equity capital, low-cost lending and grants in a growing portfolio of profitable early-stage (small) businesses including family farms, as well as enterprises that may not be profitable but rather produce vital social services for the Community.** AILCs use the MPE idea within a framework that focuses on education connected with practical learning and profitable applications of knowledge that is important for well-being in rural Africa.

**This strategy emphasizes self-reliance in finance.** AILCs should be importantly financed from their very beginning by local funds contributed by local communities of stakeholders who have become advocates of the CSAL vision. These funds form an endowment structured as a Community Investment Trust (CIT) that is intended to last and grow forever for benefit of the local community. The boundaries of "local" and "community" are inherently subjective and hence fuzzy, but the purpose of empowering people to help themselves through financial self-reliance should be clear. The commonplace assumption that money should flow from the "haves" to the "have-nots" needs qualification. Naturally, once the seeds of transformative

social change are sown and watered in a local area and the plants are visible, their growth will be fed and irrigated by the Main Stream. In my view, the key is starting the process by people helping themselves with a coherent plan for innovation—step by step leading to transformative social change. I return to this point in the concluding chapter.

## Chapter 2

### Toward Local Autonomy: The Concept and Rationale of CSAL

*Introduction: I have distilled from WILMA's experience a prototype "engine" for comprehensive local-area development that may create a breakthrough for marginalized rural areas in Africa and beyond. The parts and assembly of this engine are necessarily complex, as was the steam engine for its era, but this engine has comparable power to change the world.*

#### It Starts with Rural Education

Rural communities around the world, having well-defined lands, deep cultural roots in the land, and natural resources that they aim to protect and develop, are in a position to be leaders of the forthcoming global struggle to preserve, rebuild, and enhance the planet's natural environment in the face of challenges arising from human degradation. The stakes are high: sustaining the quality of life for a diversity of living beings. These communities stand to prosper from this leadership, while preserving the cherished roots of their culture. People who have migrated (physically, socially, mentally, and spiritually) far from natural values will benefit also, because the results for the commons are inherently shared.

Schools on the forefront of social change aim to **educate the leaders of the future**. Ideas about how to accomplish this daunting task are changing. **Educate** now involves hands-on work: managing, leading, and especially doing. **Leaders** must use the not-for-profit sector as well as make the for-profit and public sectors aware that all sectors must somehow cooperate to serve the emerging needs of the Planet. As for **the future**, that's the world we all want to see -- ecologically sound, environmentally preserved, with well-paid, rewarding, honest work available for all.

In the CSAL business model, schools, cooperating with other organizations having an interest in improving education while advancing their local communities, take the initiative to create a CSAL program to benefit their Local Area. For this purpose an interested group of schools should form a Local Area School League (here called a LASL)--the term "league" suggesting a parallel with a sports league, which school groups often organize to support their sports programs.

#### The Rationale for LASL

Better nutrition and health are likely to be central interests of schools forming a LASL. They may include boarding schools where faculty eat with the students, thus providing an intimate platform for the nutrition-learning dialogue. Such Schools may well be located in rural areas that are rich in natural resources. Indeed, they may have started as schools that had working,

educational farms to meet their own needs. This connection between growing food and education has been widely lost with the industrialization and globalization of food supply. The adverse effects of poor nutrition on the health of students and youth in general are becoming priority concerns, especially in higher-income areas. On the other hand, poverty and neglect is also damaging to health. In the opinion of many, restoring focus on the nexus between growing food, energy conservation, and education would produce gains in income, education, health, and general well-being of the diversity of life on the Planet.

Toward these basic goals, secondary schools and colleges are increasingly venturing into “farm-to-table” activities. However, they are experiencing difficulty in finding sufficient labor and capital to grow their programs in such activities, which are often deemed not essential for passing standardized tests typically imposed by governments and accrediting organizations. Through local initiatives these activities need to be scaled up and made more efficient. If this can be achieved, food and its origin will become a more important part of school curricula. Coursework will include food politics, nutrition, the history of food and the evolution of taste, agroforestry, soil science in the context of food production, plant biology, plant breeding, anthropology, geomorphology, geology, and wildlife ecology. The arts and social activities may also be incorporated, providing opportunities for students to express themselves and their values in the face of the inadequate systems that are now dominant.

Practical benefits to the schools affiliated with a LASL will be products that they can use: foods, agribusiness and forestry products, materials, and services provided by the students. The schools may also get better water management and cheaper power from some combination of biofuel crops, wind and solar technology, and agro-waste conversion. These are growing “green” industries using new technologies whose dissemination will be speeded by the CSAL Network.

### **The LASL As an Investor**

Through the innovative corporate structure discussed below, the LASL becomes a partner and investor in for-profit Community Supported Enterprises (here called CSEs), from which it receives income to support relevant training and practical business experience for its students. In this commercial arena the LASL will cooperate with working educational farms whose mission is to “produce and educate.” Foods and agribusiness products marketed by the LASL with these farms will command higher prices corresponding to higher quality that the consumers learn to appreciate. The LASL may use a percentage of such income to fund research that challenges prevailing myths, exposes damage to people, identifies market failures (harmful externalities), and generally lends itself to community building and wellness.

Eventually the LASL stands to raise funds from alumni who received their start in enterprises that taught them to lead and learn by doing. Some of these high achievers may become leaders of the affiliated schools or of businesses in the local service area, feeding their experience and wealth back into the local economy.

As the LASL builds its “human capital” and “knowledge capital”, it contributes a rising flow of talent to the CSEs in which it invests. This capacity building underpins a growth engine for sustained growth of jobs, income, and wealth for the long-term benefit of the Local Area.

## The Enabling Corporate Structure

I depict the growth engine of a CSAL program in the following chart. It suggests how a LASL and its partners create and (partly) own a For Benefit Corporation (or B-Corp) that I shall call an **Agroforestry Innovation Learning Center (AILC, or simply the Center)**.<sup>9</sup> In concept this entity is a mission-driven company devoted to research, experiential learning, and testing in agroforestry, including linkages with opportunities for profitable business that are consistent with the goals of the LASL and its co-owners.

**The Center provides seed finance for start-ups and early-stage investment along with a comprehensive Business Development Services program to serve a growing clientele of for-profit Community Supported Enterprises (CSEs).** The chart suggests that these enterprises might profitably produce, for instance, a variety of foods (organic meats, vegetables, dairy, aquaculture products), wellness and nutrition products, biofuel such as pure plant oil for diesel, applications of new technologies for sustainable living (conservation, “green schools,” waste and water recycling, etc.), plus relevant education and information services.

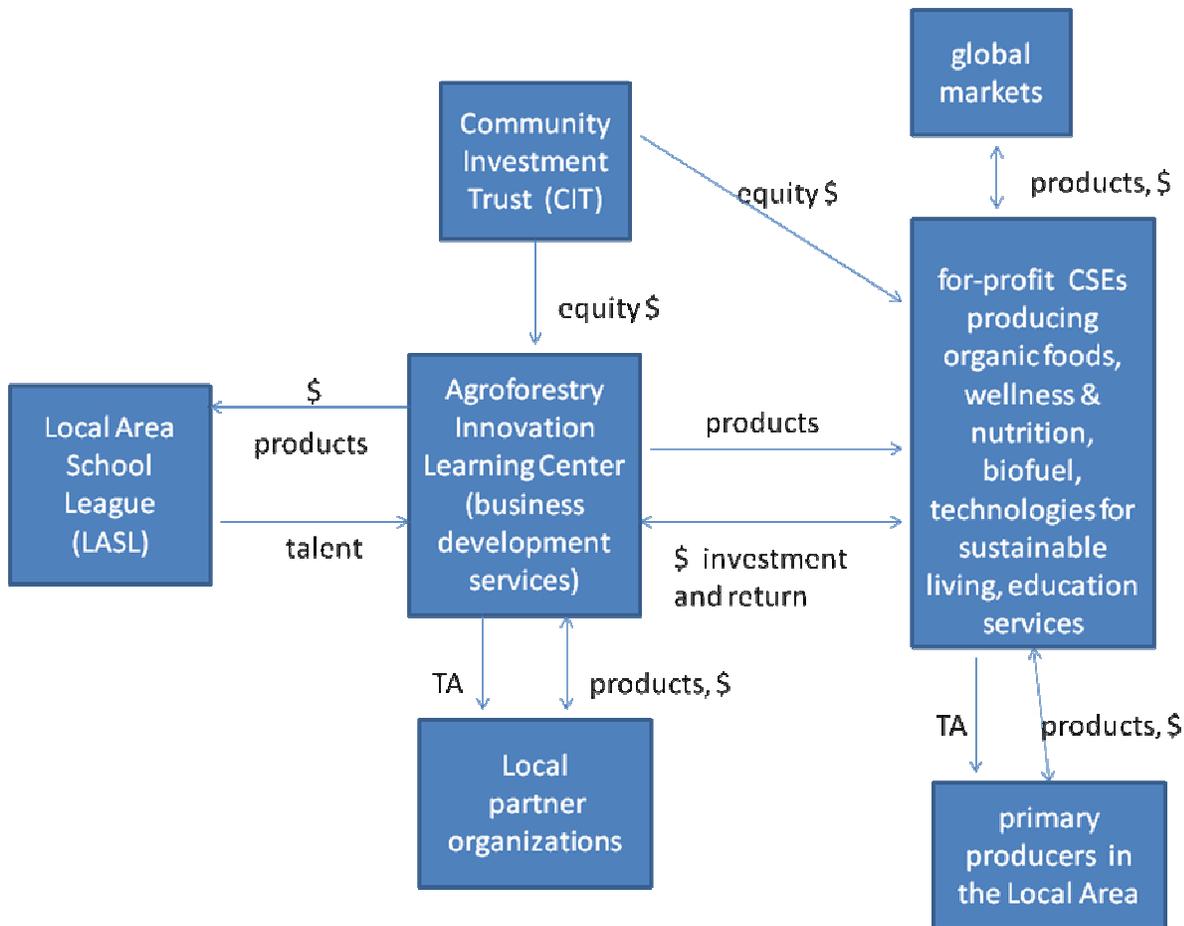
The AILC aims to build income, wealth, and well-being on a sustainable path that is consistent with the interests of its shareholders and the community of the Local Area. Toward this end, the Center’s portfolio should grow to include enterprises that realistically expect to earn a high return on investment, justifying the substantial investments typically required to achieve efficiency of scale. This return is to be appraised on financial, social, and environmental criteria that are consistent with the goals of the AILC. Thus this B-Corp is a “triple-bottom-line company,” in the jargon of current development economics.

To integrate learning with earning, the AILC invests in promising business start-ups that are led by graduates of the LASL and their families. Typically these leaders with entrepreneurial ambitions derive ideas, motivation, basic skills, and connections while in school, and then further develop their capacity for entrepreneurial leadership while engaged in practical work after graduating. The Center’s Business Development Services program identifies promising business start-ups selected from this cadre and contracts to nurture them over a period of up to two years with a suitable mix of grants and technical support.<sup>10</sup> Then, over the following five years, this program contracts to provide a mix of technical and financial services (e.g., recoverable grants and loans secured by physical property) to well-managed, profitable, early-stage enterprises, . This early-stage investment, combined with mentoring and other technical assistance, enables these young companies to become share-issuing corporations that can attract private equity capital.

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<sup>9</sup> For information about the concept of Benefit Corporations as now applied in the USA (also called B-Corps), see [http://en.wikipedia.org/wiki/Benefit\\_corporation](http://en.wikipedia.org/wiki/Benefit_corporation) . About 20 U.S. states now have benefit corporation law, and legislation in other states is pending Benefit corporation law fits the needs of CSAL Programs, and the closest available approximation to it should be used by founders of AILCs.

<sup>10</sup> In its mentoring capacity the BDS Program rigorously uses state-of-the-art techniques to guide the work of carefully-selected youthful leaders. It is now using the book “Disciplined Entrepreneurship: 24 Steps to a Successful Start-up,” by Bill Aulet, John Wiley & Sons Inc., 2013.



**The leading source of private equity capital in a CSAL program is the Community Investment Trust, or CIT** (see top of the chart).<sup>11</sup> A CIT invests equity in incorporated early-stage CSEs that are contracted clients of the B-Corp. These enterprises must qualify for such investment by the Trust’s demanding criteria, as applied by the Trust’s independent Fiduciary. The Trust’s investments typically leverage co-investment and loans by companies and agencies that endorse the values, principles, and purposes of the B-Corp. Co-investors bring specific technical and professional capacities as well as funds for taking early-stage enterprises to more efficient scale.

The CIT’s investee CSEs may be located on land owned by the B-Corp, or on land owned by the LASL and other shareholders, or on cooperating landed estates: farms, ranches, plantations, trust lands, reservations, lands protected by easements, public lands. The core purpose of the CIT is to help the leaders of these Community Supported Enterprises to take their small-business operations to efficient commercial scale without an excessive burden of debt. The CIT can leverage the operations of micro- and small-business loan funds. On the other hand, large-scale finance of business infrastructure and development projects, which governments and large

<sup>11</sup> Community Investment Trusts are documented in the PowerPoint show “[Introducing Community Investment Trusts.](#)”

corporations undertake with mainstream funding, will achieve more impact on the ground in local rural areas if combined with CIT finance and CSAL programs serving these areas.

To facilitate its educational and commercial functions, the AILC cooperates with partner producing organizations (farms, ranches, plantations, etc.), as indicated in the chart. These partners are likely to include both for-profit businesses and non-profit organizations that complement the social goals of the AILC. Community-based organizations, such as churches, clubs, public-service agencies, as well as businesses, comprise the “Sustainable Local Enterprise Network” that helps to ensure long-term support for this B-Corp and its mission.<sup>12</sup>

Over time, as the right side of the chart portrays, investees of the CIT (Community Supported Enterprises, or CSEs) source their inputs in independent primary producers of the Local Area. These producers stand to benefit from technical assistance and access to global markets that the CSEs can provide, as they grow to connect with global markets. Once a CSE has proven its capacity to organize production of primary inputs on a scale sufficient for sustained high profit, larger commercial partners may seek to invest to achieve an even more profitable commercial scale. In the long run, the original leaders of these CSEs will have opportunities to sell their equity to such large-scale investors for capital gains. Being a substantial stockholder, the AILC will use its financial and moral influence to ensure that these changes in ownership sustain its values, principles, and purposes.

### **Agroforestry As a Learning Platform for Community Supported Enterprises**

The CSAL B-Corp must have clear title to the long-term use of land that can accommodate an agroforestry plantation on a scale necessary to contribute substantially to the sustainable growth of income and wealth of the beneficiary Local Area.<sup>13</sup> The Company uses this land and other resources to build experimental agroforestry farms. It may partner with cooperating farms and agribusiness organizations in the Local Area. These partners may use the Company’s research and technical assistance to enhance their productivity, and the Company may also help them with value-added processing and marketing. The Company may gain by outsourcing various inputs to these local groups, thus leveraging its own resources to build scale for competitive marketing.

Businesses based on agroforestry are intended to be profitable in areas where poorly maintained or damaged land (whether due to poverty, population pressures, mining, unsustainable practices, or natural causes) is unprofitable for growing food. Agroforestry technology is designed for use on such marginal land and also can be used to enhance productivity and profitability on fertile soil and/or in less impoverished areas. In such places CSAL programs may help local groups to employ agroforestry techniques, using various sizes of plots of land available to them, to produce both food and inedible products of high value.

A leading example of an inedible product is Pure Plant Oil Biofuel. It is a substitute for diesel fossil fuel used in diesel engines and is produced both from the nuts of long-lived oilseed trees

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<sup>12</sup> Research on Sustainable Local Enterprise Networks (SLENs) documents their importance for local-area development. For an introduction to SLENs, see “Creating Sustainable Local Enterprise Networks,” by David Wheeler et al, MIT Sloan Management Review, Fall 2005.

<sup>13</sup> Participatory agroforestry is explained in the document “[Participatory Development of Agroforestry Ecosystems Including Oilseed Trees](#),” a research report by associates of the CSAL Network.

and from perennial crops. Various species of oilseed trees adapt to extremes of climate and soil. Using marginal land, an AILC can build early and continuing revenues from sales of perennial and annual crops as well as animals that are integral to agroforestry planning. The farm products include high-quality foods, fuels, herbs, pharmaceuticals and other produce that may be sold to local stores, schools, clinics, and other institutional buyers. The benefits to the residents of the local area can be direct and quick as well as lasting.

### **Results for Agroforestry-based learning**

I would expect a CSAL program to benefit learning by:

- Engaging in outreach to the rural and landed sector of the local economy (farmers, agribusiness, forestry and mining companies) and conservation-orientated foundations to promote commercial applications of research in both the food and non-food sectors
- Planning and implementing appropriate teaching tools for benefit of the future owners of local-area enterprises in these sectors
- Identifying and conducting location-specific research on beneficial new species (such as oilseed trees)
- Participating in research important for public policy decisions, such as water and energy conservation, biosphere protection, and reducing emissions of greenhouse gases
- Creating and operating hands-on training at ground level for labor and management for field operations

The LASL and other schools that become affiliated with a CSAL program should be leaders of this learning, given their ability to gather, distill, share and use information. With the funds for education earned by their AILCs and with learning from fieldwork, these schools can produce a continuous and detailed flow of information: data and other findings from field applications of agroforestry that eventually may enhance or even inform genomic research in the world's leading research laboratories. Practical lessons will be learned from both failure and success in all aspects of the field operations. These data and these lessons will find their way into the education products of CSAL-affiliated schools.

These education products may include (1) facilities and opportunities for educator training, interns, and volunteers; (2) a living laboratory for distance education and "electronic classrooms"; (3) websites that provide the world with free access to all papers authored by the participating schools; (4) an edited series of papers (possibly a professional journal) to convey key results to global professional audiences; and (5) teaching modules on new environmental science, such as oilseed tree biofuel, for integration with existing classroom and distance-education courses. I intend to help the Global CSAL Network to make these education products readily available throughout the world.

## Chapter 3

### Creating a CSAL Program

*Introduction: The process of creating this “engine” for local-area development requires building local capacities for leadership and management, thus achieving enough “LICR” (Local Initiative, Control, and Responsibility) to create and then operate the necessary new institutions. Perfecting the interactive roles of insiders and outsiders (“doers and helpers”) in this process is key to success.*

#### Initiating a CSAL Program

As I pointed out in the preceding chapter, native (or indigenous) peoples around the world, having well-defined lands, deep cultural roots in the land, and natural resources that they aim to protect and develop, are in a position to be pioneers of the forthcoming global struggle to preserve, rebuild, and enhance the planet’s natural environment in the face of challenges arising from human degradation. Leaders of these native peoples have an opportunity to make a difference in their own communities and to demonstrate what can be done globally. They are the natural initiators of CSAL Programs. This chapter suggests how they might be the “Doers,” and how outsiders might be the “Helpers.”

The Initiator of a CSAL Program, designed to serve a given local area (which may be a political subdivision or a social ecosystem defined by geography and culture), is an agent of the Global CSAL Network with roots in this local area. **The Initiator informs and connects local organizations whose leaders may acquire an interest in starting and sponsoring a CSAL Program serving this local area.** The Initiator connects with local commercial businesses, including farms and farm organizations, which may benefit from agroforestry-based learning and are potential supporters or stakeholders of this CSAL Program. Other interested groups may include land owners and trusts, local (regional/district/municipal) authorities, universities, faith-based organizations, civil society groups, foundations, and other non-profits with goals related to health, food, feed, agri-business, biodiversity, and natural resources. The objective is to create a network of mutually-benefitting stakeholders that are motivated to organize, sponsor, and ultimately own the CSAL Program serving this local area. Such a network has been extensively documented in development research and called a Sustainable Local Enterprise Network (or SLEN), as noted in Chapter 2.

The Initiator may start with the present concept paper and enrich it with local content, which is likely to be generated by growing interest in the beneficiary community of stakeholders.<sup>14</sup> Building on this material, **the Initiator oversees the preparation of a comprehensive Business Plan for the CSAL Program.** While associates of the CSAL Network can assist this process, the planning should be grounded in the knowledge, culture, research, and interests of local

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<sup>14</sup> The document “[The Concept and Rationale of CSAL](#)”, prepared by the CSAL Network, introduces the ideas, terminology, and structure of a CSAL Program and may serve as an introduction.

experts, including individuals and organizations that may well become contributing members of the SLEN as it progresses.<sup>15</sup>

Based on this Business Plan, as its factual content deepens over time, the Initiator presents ideas for discussion to a widening circle of local leaders who may have an interest in his proposal. As these ideas gain acceptance by these leaders, an informal network forms (the social basis for a SLEN) having growing capacity to sponsor the CSAL Program through its stages of development. This process is challenging because the CSAL growth engine is novel and, being comprehensive, has a number of moving parts that must work together. The Business Plan should be presented clearly as a sequence of steps that are familiar from present local activities that are already going on with local support.

### **A CSAL Pilot in the USA**

This model is being piloted in America. AYERSFoundation of Rhode Island, USA ([www.ayers-foundation.org](http://www.ayers-foundation.org)), was conceived to turn the historic Southern Rhode Island Dairy into a working educational farm, called Hillandale Farm. According to the Foundation's President, "The owners fervently believe that if we are to restore our agrarian economies; replenish our soils; increase the frequency and volume of locally grown foods; and do a generally better job at nurturing our youth, then we must have a road map to make these common interests happen. AYERSFoundation sees the working educational model as essential to transforming the world's ill-conceived food production system on the basis of the fundamental principle of teaching by example. Taking into account looming energy shortages, the perils of climate change, and other salient natural resource concerns, the Founder, Maxson Hence, who is a consulting forester, espouses the practice of agroforestry and its integration into the working educational model. With his passion and over twenty years of professional experience, Max has made himself available to lead this initiative as manager serving the CSAL Network."

AYERSFoundation is currently supplying to local schools education services for agroforestry-based learning, demonstrating the potential of agroforestry to "integrate learning with earning" for the benefit of the local community of Westerly. These education services are building support for a CSAL Program being planned there. Potential profitable activities for which AYERSFoundation is currently developing business plans for start-up at Hillandale Farm and/or in Westerly include:

1. Town composting program, employing as many as four people, supplied by food waste and other inputs from schools, hospitals, restaurants, farms, forests, and even interested residents.
2. 1-acre solar array with under story for grazing by ruminants.
3. 1- acre Dutch-style greenhouse capable of producing in excess of 100,000 pounds per year of fresh organic produce and employing half a dozen or more people.
4. Commercial farm kitchen designed to produce wood-fired organic whole grain breads, gourmet cheeses, among other high-value-added products. This facility will employ at least three individuals and be available for educational programming as well as for use by other organizations on a fee basis.

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<sup>15</sup> For a cautionary analysis of the role of experts in development, see *The Tyranny of Experts: Economists, Dictators, and the Forgotten Rights of the Poor*, by William Easterly, Basic Books, New York 2013.

5. US-Government-certified slaughterhouse with annexed butchering facility located downtown Westerly. This facility will be key infrastructure for enabling the revitalization of Southern RI's food-based economy.

For AYERSFoundation, a U.S. tax-exempt philanthropy with a focus on education in food sciences, serving as Initiator for a CSAL Program is a smart financial strategy. The Foundation routinely raises donations to fund its charitable programs and their overhead costs. By organizing a CSAL Program for its local area, AYERS becomes involved in raising capital to invest in installations used to enhance and compliment hands-on learning through real-world experiences that generate jobs, incomes, and careers. Thus, AYERS adds a learning-integrated-with-earning function to its education outreach, which leverages its regular philanthropy and strengthens its capacity to raise grant revenue for its core mission of education. Moreover, as it matures, the local CSAL Program will create opportunities for AYERS to earn revenue from services to profitable businesses that it helps to nurture. As a result, this non-profit organization stands to become less dependent on grants to fund its conventional philanthropy.

I believe that the Initiator of any CSAL Program can adopt this long-term strategy and aim to achieve these results.

### **Basing the Program on Education**

As Chapter 2 emphasizes, **the foundation of any CSAL Program is education**, and the participation of local schools in agroforestry-based learning is essential for the long-term success of the Program through locally-led, profitable business.<sup>16</sup> These schools may not have the knowledge resources of institutions such as M.I.T. that are on the frontier of teaching and mentoring so-called Innovation-Driven Enterprise, but these schools are able to engage youth with ideas, know-how and passion, plus a will to learn, lead, be creative, take risks for gains, and share the benefits. These youthful leaders must drive the process, backed by their teachers, mentors, and the resources of the CSAL Program. Identifying these leaders is a challenge, but the case for trying seems strong.<sup>17</sup> Below, Innovation-Driven Enterprise in Agroforestry is a concept called IDEA.<sup>18</sup>

The Initiator encourages potentially interested schools to consider forming a Local Area School League (LASL), to function as a key part of the SLEN that contributes to IDEA. The communities of interest served by these schools are naturally parts of the broader community to be served by the CSAL Program.<sup>19</sup> Schools of higher education affiliated with this LASL (e.g., focused on specific trades or technologies) may offer varied levels of education and research

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<sup>16</sup> Commercial applications of a CSAL Program are here described as Innovation Driven Enterprise (IDE). A recent book (2013) describing IDE is Bill Aulet, *Disciplined Entrepreneurship: 24 Steps To A Successful Start-up*. In its participating schools, a CSAL Program may use this book as a basic text.

<sup>17</sup> Students interested in a self-appraisal of their suitability may use the questionnaire in the document "[Tool for Assessing Personal Capacity To Lead a CSAL Program](#)," by Paul Armington.

<sup>18</sup> A WILMA Partner, BASIC-M Inc., specializes in providing for a modest fee a full range of on-line courses designed to assist leaders for the start-up of CSAL Programs with specific technical issues. See [www.basic-minc.com](http://www.basic-minc.com).

<sup>19</sup> More information is provided in "[Benefits to a School of Affiliation with CSAL and Requirements for Achieving Them](#)," by Paul Armington.

services, including advanced lab-based research essential for technical progress and commercial opportunities in agroforestry. Over time the LASL should underpin the process of exploring the business potential of agroforestry-based learning through research and experiment, contributing local content to IDEA.

### **Marginal Land: Using an Under-used Natural Resource**

Land is the central natural resource of agroforestry, especially land that is considered marginal for growing food but that can be improved through agroforestry science. NGOs and their partners in the protection of environmental resources (local, national, and international) have the capacity to contribute and/or assign rights to a CSAL Program for long-term use of land—land that can be used to demonstrate the participatory approach to agroforestry and the commercial applications of the knowledge it generates on the basis of research in the biological sciences. Where relevant law allows, such an NGO may be empowered in its mission by being part of the SLEN and a stakeholder in the future profit stream of the CSAL Program. This relationship enables the NGO to show how land protected by covenants with social, environmental, or cultural purposes can also be used for profitable enterprise benefiting the land owner. Lands owned and managed by faith-based organizations, schools, villages, municipalities, and other local government agencies may be part of the under-used natural resource potentially available.

Land owned privately, publicly, and in mixed legal forms (e.g., private land with conservation easements or similar restrictions in the public interest) may be provided under long-term lease suitable for tree crops (25 to 100 years), in exchange for a nominal sum paid up front to the owner and a participation in future revenue from use of this land, as projected in a properly-qualified business plan submitted as a condition for the agreement. This financial participation is legally supported by a contract specifying the statistical basis of the expected stream of income to the land owner (e.g., a percentage of various product sales).

### **Forging the New Required Business Institutions**

The previous chapter briefly described the enabling institutions of a CSAL Program. In due course the Initiator of a CSAL Program helps the SLEN to create a new corporate entity, which I call **an Agroforestry Innovation Learning Center, or AILC**. The AILC serves as the central business institution of this CSAL Program. In concept this entity is a “triple-bottom-line” For Benefit Corporation. It **functions as an agroforestry-based research, testing and learning center for IDEAs (Innovation-Driven Enterprises in Agroforestry)**.<sup>20</sup>

Contributors of value to an AILC, including members of the SLEN who wish to hold interest in it, are compensated by equity. Not all shareholders necessarily invest cash. Value may be contributed in proprietary technology, professional skills (including management), and hard work (“sweat equity”). Interested schools, having created an entity (a LASL) that can hold shares in an AILC, may be shareholders investing “human capital” in the long-run productivity

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<sup>20</sup> The functions of a AILC are similar to that of a Climate Innovation Center, an innovative program recently introduced in Africa by the World Bank’s infoDEV unit. The World Bank, now rolling out “CICs” in many developing countries, may well become an ally of AILCs in Tanzania. See [“Crowdfunding’s Potential for the Developing World”](#), 2013, infoDEV, Finance and Private Sector Development Department, World Bank.

of AILC, and thus have a voice on the Center’s Board. The schools are beneficiaries of the AILC’s contributions to the practical education of future students, and some of these students’ earnings should tend to flow back to their schools as alumni support.

**Any AILC is privately financed by a kind of community-supported endowment that I call a Community Investment Trust (CIT).<sup>21</sup> A CIT is the dedicated finance arm of the local CSAL Program. The Business Development Services program of the AILC serves as the CIT’s agent for pipeline development and risk mitigation. A CIT builds and owns a professionally-managed fund designed to provide “patient capital” including private equity (PE) for early-stage financing of Community Supported Enterprises (CSEs) that conform to the principles of IDEA.**

This innovative financing instrument brings many advantages to the Program’s youthful entrepreneurs and to their schools. The AILC’s finance for scaling its CSEs does not compete for funds with school fundraisers. On the contrary, by making the schools more productive in terms of what their students and graduates will learn and earn, school fundraisers become empowered to find grants for complementary education programs. The LASL strengthens the case for practical education through entrepreneurship that effectively monetizes pertinent knowledge.

### **Phases in the Startup of an AILC and CIT**

The CSAL model may be viewed as a specific structure for implementing the participatory development of agroforestry ecosystems, a set of recommendations that has developed over many decades into programs implemented in many countries with the intellectual leadership of the Consultative Group on International Agricultural Research. The Annex Table in the document (cited in Chapter 2) “[Participatory Development of Agroforestry Ecosystems Including Oilseed Trees](#)” provides a stylized list of activities in this sort of program, in chronological order. With suitable adaptations to local circumstances, this program could be implemented in many rural ecosystems, in countries both richer and poorer.

In the structure of a CSAL Program, early operations may be called the Research Phase, which uses land large enough for experiment and testing of both ideas and people. Of course, the Business Plan for any CSAL Program should specify detail pertinent to its location. On this land an AILC builds a research, testing, and learning center to manage the new work. The emphasis on education during this initial phase facilitates finance by grants, near-grant equivalents, tax credits and other forms of public subsidy for rural development, depending on local law.

The Research Phase then dovetails into the Commercial Planning Phase, wherein the AILC focuses on making the practical linkages from “learning to earning,” through the steps typically required to take a good idea “from mind to market.” By the beginning of this second Phase, AILC is already working with and helping a number of local entrepreneurial leaders to refine business plans for specific goods and services whose factual basis is work they have been doing as AILC clients. The AILC has effectively been serving as a business incubator during the Research Phase, which has combined research, practical learning, and the generation of business

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<sup>21</sup> The principles of CITs are presented in the PowerPoint show “[Introducing Community Investment Trusts](#).” For a recent report on private equity finance in Tanzania, see <http://www.kibuukalaw.com/newsroom/tanzania-warms-private-equity-challenges-exist> .

ideas with evidence of what is needed to succeed commercially under competition in open markets.

Financing AILC during the Commercial Planning Phase focuses on pitching increasingly precise plans for CSEs to “impact investors” with firm demands for financial return, short time horizons, and critical need to mitigate risk. During this period of growth in the portfolio of its clients and their businesses, the AILC is shifting from dependence for operating capital on grants and subsidies to earned income from its Business Development Services program, whose source is the business revenue of its clients. The AILC must manage its assets and revenue to achieve sufficient liquidity, which will limit its acquisition of shares in its CSEs relative to its earned income from them. **Success in becoming independent of grants requires precise business development planning and excellence in management of the AILC, just as the professionally-managed CIT must use rigorous project investment criteria to mitigate risk and prevent loss of capital.**

## Chapter 4

### Investing and Financing Strategy

*Introduction: A high degree of local autonomy (“self-help”) in finance is vital for desired results, and taking investment-grade enterprises to scale for desired impact requires a careful blend of local “doing” and outside “helping.” Both the knowledge of how to achieve this blend and the will to do it right are growing. This chapter provides a prototype plan for financing the start-up of the growth engine described in the previous chapters.*

### Starting Operations

An AILC begins operations when its income from grants and initial business earnings covers its overhead costs and when its CIT has commitments of capital contributions to invest in start-up CSEs (Community Supported Enterprises). For example, the AILC may aim initially to fund 10 start-ups in the first year at \$10,000 each, requiring an initial commitment of investment capital of \$100,000, which the CIT will draw upon as permitted by its investment criteria.

What sorts of businesses might these be? A preliminary pipeline of business ideas, based on the principles of agroforestry, is likely to combine high-value consumer goods with biomass-based sustainable energy. For example, edible oil and other products derived from oil-rich perennials such as peanuts and sunflowers may be produced by the same marginal land used to produce diesel fuel by crushing the inedible nuts of oilseed trees. In areas subject to drought, investment in reliable water supply for irrigation of new planting will be a standard part of the portfolio, taking advantage of synergies with power generation by biomass, wind and sun. A smooth transition from fossil fuels to second-generation biomass for power and transport will improve both the environment and the quality of life both for natives and visitors. Of course, clean water is also a high-value consumer good that everyone needs and (like honey, another side industry of agroforestry) is shrinking in global supply and therefore rising in global price. Areas of ample rainfall can take advantage of this coming global water shortage. Both edible and inedible legumes, used for food and energy, are combined in agroforestry with agro-waste composting to

rebuild the productivity of tired or thin soils, creating a sustainable and “sovereign” supply of food for humans and feed for animals, requiring little water once the plants are established.

In short, scientific agroforestry combines plants, animals, and people on land not optimal for growing food to maximize long-run beneficial impact on the local and regional natural environment. In more developed areas, emphasis is likely to be on organic methods of farming for improved health of people, soils, and the environment. In less developed areas, emphasis is likely to be on food/energy/water security, yielding satisfying livelihoods for long-time residents of the community. Other beneficiaries will be natives returning home from the diaspora who are seeking a better lifestyle in the countryside than they can have in the increasingly crowded and dysfunctional urban and peri-urban areas of the world.

**The global reservoir of innovations in agriculture technology is vast and steadily increasing through science and engineering in the world’s leading research centers.** The challenge is to generate fruitful application for these innovations on the ground and to motivate their efficient use. The Forward of a recent IFPRI study of food grains states: “Technology options are many, but transparent evidence-based information to support decisions on the potential of alternative technologies is relatively scarce. This is no longer a question of low- versus high-income countries but one of the planet: how do we achieve food security in a world of growing scarcity? Thus, a key challenge for our common future will be how we can grow food sustainably—meeting the demands of a growing population without degrading our natural resource base.”<sup>22</sup>

A central purpose of an AILC’s operations in Phase 1 is precisely to build “...transparent evidence-based information to support decisions on the potential of alternative technologies...” Then Phase 2 turns this information into income that can grow without limit so long as the IDEA behind it is competitive. A contribution of the CSAL model to development programming is NOT to leave out Phase 2. **Till now, learning has rarely been integrated properly with earning in the practices of food security and sustainable uses of land and water to produce the basics of life on the planet. My conclusion is that “development” and “business” need to be better integrated, especially in value chains centered on these basics of life.**

### **Financing a CSAL Program: Seed Money**

Raising the initial capital of the Community Investment Trust (CIT) is an integral part of the process of creating the AILC and of establishing its foundation in education. By the time the SLEN is ready to launch the AILC, schools, businesses, and other groups (private and public) that are interested in the initially-planned CSAL Program have become aware of their potential stake in it. They see evidence of opportunity for entrepreneurial leaders among them to make profits by commercializing innovative ideas that are proposed in the Program’s Business Plan. This is the IDEA pipeline of projects that may become qualified to be CSEs financed by the CIT. This evidence is fundamental to motivating local contributions to the Community Investment Trust. This process is not just for Program start-up: it continues as long as science, engineering, and education continue to feed the IDEA pipeline.

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<sup>22</sup> “Food Security in a World of Natural Resource Scarcity: The Role of Agricultural Technologies,” by Rosegrant, Koo, Cenacchi, et al, a publication in 2014 of the International Food Policy Research Institute (IFPRI), Washington D.C.

The seed capital of the CIT may be gifts in cash or in kind (e.g., land, materials), contributed by “insiders”--people of means who are seen as leaders of the Beneficiary Community and derive benefits from such patronage. Capital may also be contributed with provisions for its return with long-term capital gains, subject to specified restrictions. Many smaller investors, whether residents of this Community or its “diaspora” (those who call it home), may be moved to participate in raising seed money through use of a crowdfunding platform backed by increasingly-popular social media, as recommended for infoDEV’s Climate Innovation Centers (a program of the World Bank).<sup>23</sup> This popular demonstration of local buy-in to the IDEA can then be helpful in leveraging larger gifts and equity capital by “outsiders,” reinforced by actual achievements of planned milestones by the AILC’s founders.

Indeed, crowdfunding now appears to be the ideal financial platform whereby a well-functioning SLEN raises seed capital for its CIT. Crowdfunding for development is a relatively new idea and just starting in sub-Saharan Africa, and this new industry appears to have the capacity to “leapfrog” growing applications in the more developed world, especially if enabled by intelligent policies and regulations at all levels of government.

A CIT, when investing its own capital in the equity of CSEs, can leverage its own funds with bank debt in order to build scale of assets under management, spread fixed costs, and hence increase net returns to the AILC from its portfolio. The CIT will not borrow to finance operating expenses of the AILC.

### **Beyond the Start-up: Raising Capital for Investment in Agroforestry**

The importance of the CIT lies in its potential to mobilize non-debt-creating capital from local sources of funds, including groups having an affinity with the residents of the beneficiary community who are no longer permanent residents (that is, its diaspora). “Skin in the game” by locally-influential individuals and groups, which may be organized by a crowdfunding platform contracted by the Initiator of the CSAL Program, may well leverage outside-the-crowd funding needed for capacity building: investment in human capital and institutions. Then, access to program finance on a bigger scale and in appropriate forms is likely to be needed before the CSAL Program can be self-financing through earned income, given normal lags of production in the agroforestry sector. Following is a general assessment of prospects for such substantial financing for the long-run sustainability of any CSAL Program.

Funding for the first few years of a CSAL Program may be conceived in three parts: (1) funds for the planning and underpinning of the CSAL structure, particularly for education, training, and capacity building in the targeted service area; (2) capital for the start-up of the CIT and AILC (probably in the range of several \$ millions so as to achieve sustainable scale in a few years) ; and (3) “patient capital” (recoverable grants, Program Related Investments, as well as equity) to fund business preparation activities, particularly feasibility studies for an initial pipeline of enterprises that aim to qualify for PE investment by the CIT.

In addition, public grant funding may be sought for relevant projects of university labs and research centers--projects for which the AILC functions as a subcontractor for a university or its cooperating network. For example, the AILC may assist research in biochemistry by contracting

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<sup>23</sup> See <http://www.infodev.org/a2f>. Also “[Crowdfunding’s Potential for the Developing World](#)”, 2013, infoDev, Finance and Private Sector Development Department, World Bank.

to provide field testing facilities for new seeds and innovative methods of growing and processing.

On the basis of this initial finance, “impact investment” in its varied forms (requiring return of capital plus some financial return as well as evidence of benefit to the service area) may be used in the Research Phase to finance physical capital formation (utilities and other infrastructure, plant, and equipment) on lands being used by the AILC for research, training, and demonstration.

Is adequate funding likely to be found to bridge the gap (sometimes called the valley of death) between seed finance and advanced-stage finance through profit, equity and debt? I find that the opportunities for securing this gap finance are increasingly favorable, as documented in the research of major institutions of finance and development.<sup>24</sup> As stated in a report by the U.N. Food and Agriculture Organization (2010), “Agricultural investment growth has not only been spurred by increased agricultural prices and food security concerns, but also importantly because of innovation and experience in risk mitigation of investment. One manifestation of this phenomenon is the proliferation of funds set up to target the agricultural sector—agricultural investment funds.”<sup>25</sup>

Moreover, a movement for self-sufficiency in food, called food sovereignty,<sup>26</sup> is motivating many public and private funds that are focused on projects of interest to AILCs. Research in this field of food sovereignty ranks high on the agenda for the financiers of development. They want to respond to demand for transformative social change that is being articulated by the people whom development is intended to serve in marginalized rural areas. There is an emerging consensus that, while governments must help (in part by asserting food sovereignty as a goal), local interest must lead, especially through private enterprise that is socially responsible. Farmers and other land users who want to make more productive use of their land should be innovating enterprises, moving from subsistence to profit. This will require linked innovations in energy and water. Some sources of biofuel, notably oilseed trees, are good for sustaining or replenishing land, energy, and water, while contributing to food production and improving climate. CSAL Programs will typically invest in locally-optimal sources of biofuel as a key aspect of its focus on rural infrastructure.

**So founders of CSAL Programs have opportunities to engage many potential sources of funds for their Programs. These institutions are promoting food security and sustainable energy,** which in international discourse now carries the connotations of local autonomy in food, energy, health, water, and the basics of life derived from a vital ecosystem. With its emphasis on building capacity for local autonomy, the Global CSAL Network stands ready to help. One source is the Global Agriculture Food Security Program (GAFSP), a fund managed by the World Bank’s International Finance Corporation (IFC). Another, now focused on Africa, is the Agriculture Fast Track (AFT) Fund, managed by the African Development Bank (AfDB). The Inter-American Development Bank has opened a new window on its website devoted to the same goals. The World Bank (infoDev) is interested in forging PPP (Public Private Partnerships) for

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<sup>24</sup> See “Agricultural Innovation Systems: An Investment Source Book,” available here:

<http://siteresources.worldbank.org/INTARD/Resources/335807-1330620492317/9780821386842.pdf>

<sup>25</sup> This report, titled “Agricultural Investment Funds for Developing Countries,” is available here:

[www.fao.org/fileadmin/user\\_upload/ags/.../investment\\_funds.pdf](http://www.fao.org/fileadmin/user_upload/ags/.../investment_funds.pdf).

<sup>26</sup> [http://en.wikipedia.org/wiki/Food\\_sovereignty](http://en.wikipedia.org/wiki/Food_sovereignty)

its Agribusiness Innovation Centers.<sup>27</sup> The World Bank Institute, using its social media program called EVOKE, wants to help local leaders to create youth movements for social change, which can help to motivate participation in community crowdfunding for development.<sup>28</sup>

Many U.S. Government agencies are involved in this international effort, both for progress abroad (USAID, USTDA, MCC, et al) and at home (USDA, EPA, NSF, et al). USDA has a National Institute of Food and Agriculture that funds competitive grants through its Small Business Innovation Research Program (SBIR), which is allied with National Science Foundation's more general SBIR program. Innovation is the keyword in both. Internationally there is USAID's Development Innovation Accelerator (DIA), which has announced its intent to fund in 2015 a number of projects abroad that promise path-breaking progress in "Global Forestry and Biodiversity Conservation."

Meanwhile, America's wealthy "impact investors" are becoming interested in "Promoting Sustainable Food Systems through Impact Investing", the title of a path-breaking report by the Springcreek Foundation of San Francisco, which is available at <http://www.thespringcreekfoundation.org/>. The Corporate Council on Africa is helping to connect large U.S. businesses with Africa's drive to supply enough power to sustain high growth, and these businesses will benefit from partnering with CSAL Programs. For Tanzania (my present focus in Africa), the Millennium Challenge Corporation is having successes in supporting large-scale infrastructure projects that will improve profitability in CSAL-supported enterprises forming in or near the areas served by these large-scale projects.

The Global CSAL Network is beginning to market the CSAL model to the native people of America, who are *de jure* citizens of Sovereign Nations within the USA but have reason to doubt their autonomy *de facto*. Native Americans clearly have a special interest in the present global movement toward food sovereignty and sustainable energy. They have a strong case for not being left out of this movement, and their argument is not weakened by being located within a high-income country that dominates the globalized industry for monocrops. Thus, for example, AYERSFoundation's CSAL Program (discussed in Chapter 3) regards the nearby Narragansett Tribe as a potential part of its service area and SLEN.

Much the same might be said about people living close to the land everywhere. On average they may be relatively cash poor but have other resources including a distinctive culture and habitat. They may also have a sense of community of shared interest and a capacity to build trust within this community, which now in the Internet Age is the essential basis of crowdfunding for development. Particularly in Africa where I work with WILMA, the words family and community and tribe connote a capacity to build social cohesion through trust, which is a capacity that may be used to improve lives in rural areas through financial self-reliance with appropriate outside help.

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<sup>27</sup> See for example [http://www.infodev.org/infodev-files/tanzania1\\_aic\\_business\\_plan\\_mp\\_edits\\_0515.pdf](http://www.infodev.org/infodev-files/tanzania1_aic_business_plan_mp_edits_0515.pdf)

<sup>28</sup> Read about EVOKE here: <http://wbi.worldbank.org/wbi/news/2010/02/18/wbi-launches-evoked-crash-course-changing-world>.

## Chapter 5

### Summary and Conclusion: Helping People Help Themselves

*Introduction: So, what have we learned? And what should we be doing?*

Listed below are principles that I have gleaned from my experience with WILMA in “helping people help themselves.” These principles should guide strategies by outsiders (like me) for helping local leaders to devise and launch CSAL Programs anywhere. They should also guide the way the resulting holding companies (AILCs) help their client entrepreneurs to start and build profitable Community Supported Enterprises.

- As my Methodist grandmother used to say, “Money is the root of all evil,” but, likewise, money is the root of community-supported development, and it needs to be rooted deeply in the community’s own soil (its mental model of self-reliance). As my father said, “It takes money to make money,” and when seed money comes from the community itself, even if small, there is a chance that the tree will grow tall and strong.
- The “Doers” (the people helping themselves, i.e., the “Community” of a CSAL Program) should pay for services that they receive from the “Helpers” (outsiders), who, if asked, should help to raise the required funds from partners or benefactors of the Program. The point here is that the Doers should be in control of the process, including the ability to “just say no” to would-be Helpers.
- The Helpers should not offer money directly to the Doers, or cause expectations of same. This imperative shocks the *status quo* because the Doers, having been conditioned by decades of the mental model of foreign aid, naturally expect the Helpers to lead with their money.
- Leadership is the scarcest of all types of the “human capital” needed for social change, and the mindset of effective leaders is steeped in the understanding of how the participating humans think and of how history and context shape their thinking.
- Followership is crucial to validate and empower leadership for movements of transformative social change. To understand how this works, see <http://vimeo.com/57700511> .
- The most important operating function of leaders is their ability to hold their LICR (Local Initiative, Control, and Responsibility). LICR is scarce, a trait of character or personality that Helpers may learn to recognize by cultivating long and trusting relationships.
- With their own mental model, Doers should specify the institutions and processes that they cause to be created within the generic framework of the CSAL mental model. This framework is merely a template that the Helpers propose, which they support in principle but do not own or control.
- The Helpers build the leadership capacity of the Doers by providing trustworthy services until they are no longer needed. Helpful connection need not be broken so long as trust continues. Investing private equity in enterprises through an AILC and its CIT is a good way to maintain mutually useful connections with entrepreneurs and their IDEAs.
- The Helpers naturally care about results and seek satisfaction from their work, so they wish to remain helpful to the Doers and may retain shares in AILCs for an indefinite period. AILCs may benefit from outsourcing technical services to Helpers, both commercial and not-

for-profit. The latter will value this service income as they become less dependent on their traditional sources of grants while fulfilling their missions in a commercial way.

- The Doers collectively do not need to own a majority of the shares in their AILCs, but they should effectively control a large minority holding and, combined with other shareholders whom they trust, should be able to control Company policy to thwart any violations of its founding values, principles, and purposes. An AILC's success as for-benefit business will attract investors whose behavior is moved by a different mental model, so safeguarding its mission should be part of an AILC's strategy from the beginning.
- A continuing service of the Helpers is to identify outside investors who can be trusted to share the values, principles, and purposes of the Doers. This task is becoming easier with the global advent of social enterprise, for benefit corporations, impact investing, social networking, and "sustainability" of systems as a key development goal for both private and public investors.

Consistent with these principles, Helpers can assist the founders of CSAL Programs in the following specific ways:

- Identifying underutilized local resources that can be used to form AILCs; such resources include personnel (both leaders and residents with many capacities), land, materials, and the capital and know-how of existing enterprises
- Organizing these resources into AILCs; connecting them with sources of knowledge and technical experience, including industry experts and managers of funds having an interest in Community Investment Trusts
- Arranging grants and low-cost loans for individuals with entrepreneurial drive to start local enterprises that potentially qualify for investment of private equity capital and other forms of profit-sharing patient capital
- Attracting additional resources for high-impact development — being a "catalyst," if needed — especially in the field of grants and low-cost patient loans for education and the mentoring of youthful entrepreneurs who intend to build businesses in agroforestry-related sectors
- Connecting AILCs with national and regional projects that aim to reduce poverty by building rural infrastructure (lines for power, water, transport, and telecom) and that can improve results in heretofore marginalized areas by linking with AILC investments.

I am confident that, by following these principles and providing this help, the group of experts I have joined, the Global CSAL Network, can help to start a movement for the founding of CSAL Programs. Leadership with LICR must be out in front. I hope that this essay about leadership will help to identify and motivate LICR and that, as a result, we Helpers and Doers will all gain insight into David Ellerman's conundrum of "helping people help themselves."

Bridging the cultural divides between Helpers and Doers is not easy because they tend to have different mental models of what works. Differences in mindset make productive direct linkage difficult. Both can be jointly productive by learning to walk the path that leads from **data** to **information** to **knowledge** to **understanding** to **wisdom**. Helpers are more comfortable in the first half of this journey, while Doers are more comfortable in the second half. The World Bank's WDR for 2015 (referenced in the Preface) indicates that the intellectual leadership of the global development enterprise has shifted to a focus on how humans actually think, and how

different mindsets forged in different cultures may be changed over time to good effect. This shift gives me reason for optimism that my answer to Ellerman's conundrum may actually help to "Get Africa Out Of the Poverty Business."