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Alternative agricultural investment by and for small-scale food providers in Tanzania: A Right to Food & Food Sovereignty Perspective

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Abbreviations

AGRA	Alliance for a Green Revolution in Africa
CFS	United Nations Committee on World Food Security
CNOP	Coordination Nationale des Organisations Paysannes du Mali (National Coordination of Peasant Movements of Mali)
FAO	United Nations Food and Agriculture Organization
G8	Group of Eight
IAASTD	International Assessment of Agricultural Knowledge, Science and Technology for Development
IFAD	International Fund for Agricultural Development of the United Nations
JICA	Japan International Cooperation Agency
MVIWATA	Mtandao wa Vikundi vya Wakulima Tanzania (National Network of Farmers Groups in Tanzania)
NAFCO	National Agriculture and Food Corporation of Tanzania
NGO	Non-governmental organization
NFRA	National Food Reserve Agency of Tanzania
SAGCOT	Southern Agricultural Growth Corridor of Tanzania
SEZ	Special Economic Zone
TAGRODE	Tanzania Grass Roots Oriented Development
TOAM	Tanzania Organic Agriculture Movement
Tsh	Tanzanian shillings
UN	United Nations
UNAC	Mozambican Peasant's Union
USAID	United States Agency for International Development
ZIMSOFF	Zimbabwe Small Holder Organic Forum

Executive Summary

Agricultural Investment by and for Small-Scale Food Providers

Tanzania's rural food providers are as diverse as the resources on which they depend, from Masai pastoralists whose cattle graze the sweeping Southern Highlands, to fishers who cast their nets off the shores of sleepy Swahili beach towns, to farmers who pass heirloom seeds from generation to generation on the steamy tropical farms of the enigmatic islands of Zanzibar. Together, they represent a majority of the population, generating life-giving resources for their families and communities with well-adapted strategies. While modest support to these food providers could go a very long way in ensuring their ability to feed themselves and the rest of the population, unfortunately, the reality on the ground in Tanzania is instead one that increasingly undermines its population's right to food.

This study in many ways picks up where an earlier, related study, entitled Impacts of large-scale agricultural investments on small-scale farmers in the Southern Highlands of Tanzania: a right to food perspective (Twomey et al. 2015), left off. The first study, in which research was conducted in Tanzania's Southern Highlands in March 2014, examined the impacts that large-scale agricultural investment projects were having on the right to food of small-scale farmers in surrounding communities. The impetus for that study, as with this one, is that Tanzania is in the midst of what is planned to be a major transformation in its agricultural sector through its involvement in initiatives such as the G8's New Alliance for Food Security and Nutrition in Africa and the Southern Agricultural Growth Corridor of Tanzania. These interconnected initiatives are aimed at rapidly expanding private investment in agriculture—with major implications for the nearly 80 percent of its population engaged in small-scale farming, as well as other food providers such as pastoralists and fishers.

The findings of the first study were overall quite negative, including significant violations of the right to food associated with the particular investment sites examined, and numerous concerns cited regarding SAGCOT, which appears poised to perpetuate, and likely intensify, these violations. The study concluded that agricultural investment that actually supports the right to food would require a radically different approach from that represented by SAGCOT. What the first study stopped short of doing, however, was to address the question of what alternative agricultural investment in support of the right to food might actually consist of. This is the objective of this second study—to offer insights into what types of investment could support the right to food, and what types of investment are already supporting the right to food, of small-scale food providers in Tanzania. This has involved a much broader and more holistic understanding of 'investment' than the current narrow mainstream definition. It has also involved recognizing the small-scale food providers that comprise the majority of Tanzanians as key protagonists in realizing the right to food, and as investors in their own right. Grounded in this context, this paper explores the question of what forms of investment support the right to food of small-scale food providers about their needs and visions.

Data Collection

The field research for this study took place over three weeks in October 2014 in three distinct zones of Tanzania: the Southern Highlands, the Coastal Zone, and Zanzibar. The Southern Highlands of Tanzania were selected for their strategic importance as 'the breadbasket of Tanzania' and the area targeted for development under SAGCOT. The Coastal Zone was selected for its proximity to the major hub of Dar es Salaam and because it is the site of many fishing communities, whose voices we sought to highlight. The archipelago of Zanzibar was selected both because its Food Security and Nutrition Act of 2011 had been singled out by the former UN Special Rapporteur on the Right to Food as a model piece of legislation in support of the right to food, and also because of a strong presence there of farmer-based networks piloting alternative forms of agricultural investment.

To identify the most appropriate sites to visit within each zone, the researchers worked with Tanzanian partners who had longstanding community relationships built over time. Criteria for site selection included examples of innovative forms of agricultural investment as well as promising practices and models with the potential to be strengthened and scaled up/outward through supportive investment. An effort was also made to seek out and speak with a diversity of different types of food providers, including peasants, pastoralists, fishers, and seaweed harvesters in order to paint as holistic of a picture of agriculture investment as possible, within the time constrains of the study. Given the integral role of women in food provisioning, the voices of women within and across these each of these sectors were specifically sought out.

Analysis: A Right to Food Approach, Informed by Food Sovereignty

For the data analysis, this study has woven together the frameworks of the right to food and of food sovereignty to examine alternative investment for and by small-scale food providers in Tanzania. The right to food—defined as 'when every man, woman and child, alone or in community with others, has physical and economic access at all times to adequate food or means for its procurement' (CESCR 1999)—is an internationally-recognized, legally binding framework. This basic right can only be fully realized when measures are taken by the state, in concert with other actors, to respect, protect and fulfill it. That is, states are not only obligated under international law to protect and uphold existing rights, but to proactively take steps toward the (further) realization of rights. This third component of the right to food actually look like in a given context? And what would agricultural investment in support of the right to food look like? We argue that this is where the framework of food sovereignty, coming from social movements of small-scale food providers around the world, can be helpful.

Defined in short as 'the right of peoples to healthy and culturally appropriate food produced through ecologically sound and sustainable methods, and their right to define their own food and agriculture systems' (Nyéléni 2007a), food sovereignty is a proposal coming directly from those who comprise the majority of the world's hungry, based on their own processes of articulation and consensusbuilding. As related to the theme of this study, we argue that food sovereignty can be viewed as a proposal for investment that supports active realization of the right to food (and associated rights) designed by those most impacted by hunger and food insecurity—those, who, in theory, should be at the center of efforts to realize the right to food. Or, to put it differently, we argue that employing a food sovereignty framework can help to address how the right to food can be fulfilled in a given context and thus can serve as an important tool for envisioning—or re-envisioning—agricultural investment.

In order to translate food sovereignty from a broad vision into concrete, actionable proposals, social movements of food providers from around the world have jointly developed the following six pillars of food sovereignty (Nyéléni 2007b):

Food sovereignty ...

- I. focuses on food for people
- II. values food providers
- III. localizes food systems
- IV. puts food locally
- V. builds knowledge and skills
- VI. works with nature

We have used these six pillars to guide the analysis of this study, to help us explore what agricultural investment in support of the right to food might look like in the Tanzanian context.

Findings/Key Messages:

I. Focusing on Food for People: To support 'food for people' in Tanzania entails a number of important shifts. Systems must be in place to support the production of key food crops of strategic importance at the national level that guarantee fair and stable prices for food providers and adequate storage, supply management, and distribution capacities of the state to ensure a stable food supply that reaches those who need it. At the same time, food providers need support in diversifying their production for the provisioning of food for adequate and healthy diets, starting at the local level.

II. Valuing Food Providers: Investment that values food providers should start from their realities, supporting and strengthening their ability to feed themselves and their communities and to undertake the new endeavors that they envision. Such investment must go hand-in-hand with supportive and inclusive national policies that recognize the many contributions of Tanzania's diverse food providers, as well as the specific challenges that they face. This can best be achieved by genuine and meaningful inclusion of food providers in policy development and implementation

III. Localizing Food Systems: Communities are investing in their local food systems in a variety of ways, from cooperative development to local food processing enterprises. Efforts by the state to support the right to food therefore need not start from scratch, but could and should start from the many existing initiatives underway that are already feeding people and supporting livelihoods. One appropriate starting place is the provision of credit and basic infrastructure. This would entail modest amounts of funds which could have major multiplier effects within local food systems.

IV. Putting Control Locally: The right to food in Tanzania is unrealizable without access to and control over natural resources—starting with land and seeds, as well as water. If these precious resources slip through the fingers of the rural working peoples whose lives and livelihoods depend on them, there is little hope for realizing greater territorial rights through managing diverse interconnected food systems such as farms, fisheries, and grazing lands.

V. Building Knowledge and Skills: There are a variety of bottom-up agroecological and other grassroots initiatives for which food providers from the farming, fishing, and pastoral communities seek support. This can be realized through varied channels that encourage horizontal learning exchanges and support appropriate technology. In each of these instances, support for saving and lending and help through extension can make a world of difference to a project's success.

VI. Working with Nature: Small-scale food providers in Tanzania are demonstrating the viability of agroecology through diverse cropping systems integrating livestock; seed saving and exchange; fertilizing the soil free of synthetic inputs; natural pest control, and sustainable practices in fisheries and livestock management. Such practices also hold great promise in the face of climate change and yet have largely been overlooked. Investment that truly supports sustainability means investment that supports the types of grassroots initiatives outlined within.

Conclusions

This research has sought to shed light on what alternative forms of agricultural investment in Tanzania could look like beyond the vision represented by SAGCOT and the G8 New Alliance. What we found, and what we have attempted to provide a sampling of, was a tremendous repository of knowledge and of solutions at the grassroots level that, with adequate support, hold great potential for the realization of the right to food for all Tanzanians. And yet, this knowledge and these solutions have been largely bypassed in the midst of the many plans underway for the wholesale transformation of Tanzania's agricultural sector. This represents a major missed opportunity toward the progressive realization of the right to food and stands to jeopardize the import gains that have already been made.

Introduction

Tanzania's rural food providers are as diverse as the resources on which they depend, from Masai pastoralists whose cattle graze the sweeping Southern Highlands, to fishers who cast their nets off the shores of sleepy Swahili beach towns, to farmers who pass heirloom seeds from generation to generation on the steamy tropical farms of the enigmatic islands of Zanzibar. Together, they represent a majority of the population, generating life-giving resources for their families and communities with well-adapted strategies that demonstrate both humility and sophistication. So many of these Tanzanian food providers encompass powerhouses of potential if just given appropriate support that complements their knowledge and protects their tried-and-true livelihoods. Unfortunately, the reality on the ground in Tanzania is one that increasingly undermines its population's right to food.

Recent structural trends in Tanzania's agricultural sector are indicative of tendencies in the Global South in general, and sub-Saharan Africa in particular. On the heels of the 2007-08 global food price crisis, large-scale land deals for agricultural investment intensified at an unprecedented rate. To foreign investors, these swaths of land represented new frontiers of capital reach. To cash-strapped states, they provided much needed means of foreign exchange, and even access to the global arena through partnerships with powerful countries in the Global North. But to peasant and other small-scale food providers, the commodification of their ancestral and agricultural lands portended displacement and dependency through outright land grabbing.

The food crisis was not the only crisis to be linked to a new surge of agricultural investment. The price spikes in staple foods merged with three distinct global crises: financial, energy, and climate. This convergence affected agrarian political economy significantly, as investors attempted crisis mitigation and humanitarianism on paper, promising poverty reduction and partnering with big international development organizations, while disregarding the communities whose land they sought in favor of profit. The G8 New Alliance for Food Security and Nutrition in Africa represents this current phase of the timeworn battle for Africa, where influential donor countries like the U.S. and UK partner with private sector heavyweights like Monsanto and Unilever.

As one of the ten countries targeted by the New Alliance though that network's facilitation of the Southern Agricultural Growth Corridor (SAGCOT) in 2012 with an expressed goal to lift millions out of poverty (SAGCOT 2011), Tanzania is now undertaking serious changes to its land policies. SAGCOT delineates a massive area, roughly one third of the country's mainland, extending from the Zambian border to the Indian Ocean. Yet even SAGCOT partners recognize its connection to the displacement of Tanzanian communities. According to a recent report by Action Aid (2015: 6) USAID sent a document to donors, that remains unpublished, that read in part, 'To state it bluntly, most of the lands that the GOT [Government of Tanzania] wishes to see developed in SAGCOT will need to be taken from villagers by government and leased to investors.' In this light, large-scale agricultural investments harm those they claim to help, principally by sabotaging their access to and control over resources.

However, it is important to note that it is not the concept of investment in and of itself that is so damaging; rather, it is the scale and nature of the investment. This paper, informed by the voices of grassroots communities on the frontlines of both crisis and opportunity in Tanzania, argues that if done correctly and in sync with time-tested local methods of food production, agricultural investment can have multiplying and long-lasting positive impacts on the right to food. These forms of alternative agricultural investment move away from one-size-fits-all business ventures, and invite us to reframe and rethink dominant approaches to development. That new chapter starts with honoring the investments that small-scale food providers contribute themselves as well as bringing back the state as a key actor in agricultural investment (Kay 2014). Rethinking agricultural investment here is a way of reclaiming peasant-prioritized rural development in Tanzania and beyond.

Background

A thorough understanding of the political economy of agrarian transformation in Tanzania is one that requires a discussion of the broader regional and global processes that it both stems from and contributes to. We take a three-part approach on these issues. Firstly, SAGCOT is a snapshot of a more comprehensive 'battle for Africa', which is in its own right a microcosm of a new phase of land grabbing and resource control with an eye on the role of the state. Our second point builds on investment in agriculture and food systems, wherein we explore the kind of investments being made by the G8 New Alliance for Food Security and Nutrition in Africa. This builds upon a previous paper Impacts of large-scale agricultural investments on small-scale farmers in the Southern Highlands of Tanzania: a right to food perspective (Twomey et al. 2015), which overwhelmingly concluded that large-scale agricultural investment had a quite negative impact on small-scale food providers. We look briefly at regional partnerships of a similar nature supported by the G8 New Alliance, which have similar negative outcomes, thus indicating political trends with regional consequences. This is juxtaposed by a call for alternative agricultural investment, and advocated for by grassroots food providers themselves. Finally, we look to organized social movement responses, from calls against land grabbing to agroecology and food sovereignty-the latter of which forms the theoretical backbone of consecutive sections in this study.

Land grabbing, resource control, and the battle for Africa exemplified through SAGCOT

Sub-Saharan Africa experiences the largest involuntary loss of land globally. Transfers of land have deep roots that have often been the result of legal manipulations, building on pre-colonial systems of power and class privilege that were exacerbated to justify massive resource and land capture as part of the colonial project (Alden Wiley 2012). In the decades following the independence of many African countries, financial instruments as seen through a budding futures market, speculation, and hedging were key components of new liberalization policies that heralded the globalization of agribusiness (Amanor 2012). As pointed out by Wuyts and Kilama, an underlying assumption here is that private investment is key to increasing agricultural productivity (2015). Together with heightened class formation and social division, these processes revealed deepened processes of exclusion (Peters 2014).

Even though market forces are integral to land accumulation, it is the role of the state that is most central. Wolford et al (2013) break the state function in regard to land deals into a fourfold argument. Firstly, states are not victims, or passive in resource transfer, but instead are calculating and engaged partners. The second point is that actors within states tend to exploit inequalities to mediate land access. This can be seen—and is prevalent in Sub-Saharan Africa—through the role of the elite and their control over resources as part of their control over public institutions (see also Cotula 2012). Thirdly, state responses to land deals vary widely throughout the world. In Tanzania, for example, dispossession of rural people's resources and land has been piecemeal and gradual in some instances, while it has been fast-tracked and even violent in others (see also Benjaminsen and Bryceson 2012). Wolford et al.'s final point on the role of the state pinpoints the articulation of varied types of power working together within states, including, but not limited to, the military and illicit actors. It is important to contextualize the recent land rush in Tanzania in light of these interconnected factors.

The current global land rush erupted upon the 2007-08 collision of the tectonic plates of the food, energy, financial, and climate crises. At the same time, the BRICS (Brazil, Russia, India, China, and South Africa), together with some prominent MICs (Middle Income Countries), rode out the aftershocks by using the freshly exposed chasms, in part, to solidify their own new positions as hubs of capital (Borras et al. 2012). Although capital accumulation in its various forms has resulted in various waves of dispossession (Harvey 2003), the clashes—and convergences—of crises in 2007-08 definitively marked a new point of departure for land and resource grabbing (see Edelman et al. 2013). In other words, it was a moment that reset the clock on access to and control over resources. 'If land grabbing under colonialism was a tragedy, it repeats now as farce,' McMichael reflected, squarely placing the new enclosure as one that is symptomatic of the neoliberal globalization project's crisis of accumulation (2012: 681). What constitutes a land grab is in and of itself as much of a debate as the varied functions of land. We draw on an inclusive framework presented by Borras et al. that also recognizes its significance for access to other resources, among them forests, water, and seeds.

[C]ontemporary land grabbing is the capturing of control of relatively vast tracts of land and other natural resources through a variety of mechanisms and forms involving largescale capital that often shifts resource use to that of extraction, whether for international or domestic purposes, as capital's response to the convergence of food, energy and financial crises, climate change mitigation imperatives and demands for resources from newer hubs of global capital (2012: 404 – 405).

Considering that land grabbing is part and parcel with resource control grabbing, it is useful to map common threads in the global land rush as it has been seen in the context of the food, fuel, financial, and environmental crises. White et al. identified six trends in modern land accumulation summarized as follows:

- 1. The *global anticipation of food insecurity* has prompted vast corporate investment in food crops (including feed for livestock as well as humans).
- 2. Fears of ascending and volatile fuel prices have bolstered reliance on, and increasing demand for, *new forms of resource extraction for fuel security*.
- 3. *New environmental imperatives and tools* have pushed green land grabs that supposedly foster environmental protection.
- 4. The establishment of *extensive infrastructure corridors* and *Special Economic Zones* has contributed to further land grabs.
- 5. *The creation of new financial instruments* such as pension funds and other private equity groups intend to lower market risk, while at the same time allow third party investors access to diminishing global food supply.
- 6. The international community's aid and lending programs espouse *rules, regulations and incentives* couched in international legal framework (2012: 627-630).

These trends work together as simultaneous, parallel, and overlapping processes. In sub-Saharan Africa, this is certainly true, with the case of Tanzania demonstrating particular poignancy. Tanzania's sweeping Southern Highlands form part of the one third of its entire territorial land cover that is now the site of SAGCOT, the second agricultural corridor on the continent, with Mozambique's Nacala corridor being the first of such projects. Although SAGCOT was initiated in and remains focused on Tanzania, since its inception three neighboring countries have signed on as members in 2012: Malawi, Zambia, and the Democratic Republic of Congo (Paul and Steinbrecher 2013).

SAGCOT, as a form of land accumulation, touches upon White et al.'s six aforementioned trends in tandem, and is what we argue to be a clear case of resource control grabbing. The first point – and it's an important one – is that SAGCOT is framed in the language of food security and nutrition in Africa, for Africans, and with Tanzanian labor (SAGCOT 2015). Gone, in large part, are the days of framing food production by outsiders, for outsiders, and with outside labor. Such was the case with the now-scandalous South Korean land grab in Madagascar for food exports to secure the wealthy Asian nation's own food supply with South African labor – with hardly any perceived advantage for the Malagasy people (see Burnond et al. 2013). With projects with such a win-win outlook on paper, some digging beneath the surface is required when lands are acquired in the name of societal improvement.

Secondly, while large-scale resource extraction does not take center stage in SAGCOT, fuel security is absolutely integral to its overall process. Even with the Government of Tanzania toeing the line of 'agriculture first'¹, the region is chock full of natural resources, among them, gas, coal, rare earths, precious metals, and timber (Paul and Steinbrecher 2013). Additionally, flex crops that can be used for food, animal feed, and fuel are key commodities in agricultural growth corridors (see Borras et al. 2015). Examples include oil palm, sugarcane, and corn. In this sense, investors are attempting to use one crisis to counter another.

¹ 'Agriculture First', or 'Kilimo Kwanza' in Swahili is the Tanzanian government's primary policy vehicle for poverty reduction and economic development. It deviates from prior rural strategies because of its corporate leadership and involvement of new public private partnership framing.

The third point, in White et al.'s analysis, has to do with new environmental imperatives and is closely connected to the second point on flex crops. Reducing Emissions from Deforestation and Forest Degradation (REDD+) and Climate Smart Agriculture are two key programs at the international level that drive climate change mitigation strategy today. REDD+, a carbon offset program, allows rich countries in the global North to continue polluting by investing in forests in the Global South. Climate Smart Agriculture, promoted at the UN General Assembly's Climate Summit in September 2014, basically takes that concept and applies it to farmland, where investors in wealthy nations will receive carbon credits for their contribution to 'climate smart agriculture' projects elsewhere – the initial phase is in sub-Saharan Africa. Food production is responsible for between 44 and 57 percent of greenhouse gas emissions, most of that directly linked to the wasteful industrial agricultural model (GRAIN 2011). Yet instead of confronting this model head-on, Climate Smart Agriculture avoids the root of the problem by instead building on what caused it in the first place - chemical pesticides, modified seeds, and synthetic fertilizers in the name of productivity and intensification (Tramel 2015). Last September, the International Center for Tropical Agriculture (CIAT) carried out a Climate Smart Agriculture Rapid Appraisal (CSA-RA) on SAGCOT in Tanzania. Now, the goal is to push as many Climate Smart Agriculture tenets into SAGCOT's expanding regional agenda (Shikuku et al. 2015). The multinational agrochemical giant Yara, an early promoter of the agricultural corridor concept, recently praised the SAGCOT initiative, calling Tanzania a 'role model' for future Climate Smart Agriculture partnerships (Yara 2015). The concern is that poor rural food producers will be undone throughout these processes, and now is the time to raise those doubts as both REDD+ and Climate Smart Agriculture are expected to be signed into universal and binding legislation at the United Nations Climate Change Conference (COP21) in Paris, December 2015.

Fourthly, SAGCOT is part of a bigger process, where the growth corridor works together with other neoliberal policies aimed at increased private investment and economic growth through both foreign and domestic private investment. In 2006, the Government of Tanzania set up a network of Special Economic Zones (SEZs) as part of its inclusion in the Mini Tiger Plan 2020 that is promoted to achieve agricultural and infrastructure development in a way that mimics the high-growth economies of the Asian Tiger hubs (Hong Kong, Singapore, South Korea and Taiwan) among other growth initiatives. SEZ projects include export processing zones, free ports, free trade zones, industrial parks, technology, agricultural free zones, and tourism development (Government of Tanzania 2014). For example, tourism development here is directly linked with markets and land appropriation for conservation schemes - and is viewed by many affected communities as land grabbing (Gardner 2012). While the Government of Tanzania does have an Agricultural Sector Development Program (ASDP) with a strong local component, its objectives and interventions are most often framed in private sector investments and services, easing the role of the state and facilitating large-scale market activity (ASDP 2006). These activities, collectively and separately, contribute to resource control grabbing with large-scale land deals often needed to facilitate them, yet again marginalizing rural poor people and widening gaps of dependency.

The fifth common thread of the contemporary global land rush deals with financial instruments meant to decrease market risk. These instruments are often concurrent with speculation, and allow third party investors a seat at the global table where food commodities amount to a diminishing feast for poor working people. SAGCOT, like many land deals, is focused on monocrop production – with much of its investment geared toward massive rice and sugar production. Sugar, a high demand flex crop, and priority focus of the SAGCOT business initiatives, is causing some of its most negative effects on working poor people throughout Tanzania. One glaring example is the case of the Tanzanian subsidiary of Sweden's EcoEnergy, a company that has secured a 99-year land lease that covers 22,000 hectares in the coastal area of Bagamoyo. ActionAid (Curtis 2015) recently found that communities being pushed out of their land were not given the choice of resettlement, nor did they receive free, prior, and informed consent information about their rights to land and food and the EcoEnergy project's irreversible infringement of those rights. When it comes to large-scale intensive rice farming (as well as corn – see Food for People), the risk for rural poor people can be devastating. Rice, along with wheat and other commodity crops, aroused the sleeping giant of the 2007-08 food

price crisis. McMichael explained that speculation compounded the problem, with rice prices surging by 31 percent in March 2008, when the food crisis was at a high point (2009).

Finally, lending and aid programs contain rules, regulations, and incentives written in an international legal framework that supports the Washington Consensus trifecta of stabilization to curb inflation, structural adjustment, and export-led growth. SAGCOT, as part of the G8 New Alliance for Africa, is a poster child of sorts for this agenda. Each G8 country project is led by a 'country partner,' and in the case of SAGCOT in Tanzania, that partner is the U.S. and its United States Agency for International Development (USAID) (Curtis 2015). Linking back to the first point, where agricultural investment is framed as humanitarian aid through poverty reduction, it is critical to recognize the high price that rural working communities pay for these projects in terms of privatization of their resources. USAID has enveloped SAGCOT into the U.S. Government's Global Hunger and Food Security Initiative (Feed the Future) as part of the G8 agenda. In fact, USAID describes SAGCOT as an initiative that could 'feed the East Africa region and become a major agricultural exporter to rival the likes of Brazil' (Feed the Future 2015). We explore these connections and their alternatives in the following discussion of the G8 New Alliance and what it means to rethink agricultural investment from a social justice movement perspective informed by food sovereignty.

The G8 New Alliance for Food Security and Nutrition in Africa and Rethinking Agricultural Investment

It is in this context of the new 'battle for Africa' through resource control on the heels of the 2007-08 food price crisis that the G8 New Alliance emerged, yet it is entrenched in regulations that global political powers have held over struggling African nations for decades. Whether through Green Revolution seed monopolies, outside funding and military support of right-wing political parties, or the disruption of local food system webs by inclusion into top-down commodity chains, the result has often been the same: poverty rooted in dependency. The International Monetary Fund and World Bank encouraged African governments to adapt the model of comparative economic advantage, where the international financial institutions themselves decided what the focal points of production, exports, and imports would be (McKeon 2014). Together with binding regulations from the WTO, over the course of a decade, these policies shifted Africa from a net exporter to a net importer of food, leaving states and peoples susceptible to the external shocks caused by the food price crisis. In the wake of that crisis, the parties that would eventually form the G8 New Alliance - G8 countries, African governments, and corporations - began to modify their rhetoric to one that recognized the importance of smallholder farmers and their food production (ibid). However, it would turn out to be a chorus that repeated previous political symphonies. Despite the softer tone, the New Alliance would redouble its old commitments to the private sector. At the same time, some struggling and outright broke African governments, even though not off the hook for their involvement, dealt with their own version of the classic 'chicken-and-egg' scenario - either agree with the rules and allow the development, or slip further into debt and isolation. Many were not new to the game, as they had agreed to similar parameters under Green Revolution and later neoliberal growth instruments promoted by international financial institutions, donor countries, and powerful aid agencies.

U.S. President Barack Obama announced the G8 New Alliance while his country held the G8's rotating presidency at the May 2012 G8 summit (The White House 2013, noted in Patel et al. 2015). International pledges to take on hunger had been geared towards government intervention following the food price crisis, but the G8 New Alliance deviated sharply from those promises in favor of corporations – its drafting policies had even been led by the private sector using documents such as *Achieving the new vision for agriculture: new models for action* penned by the World Economic Forum (see World Economic Forum 2013). The New Alliance came with a clear mandate, prioritizing agriculture to lift 50 million Africans from poverty by 2022. Focus on corporate partnerships, they emphasized, was the way to make that happen (USAID 2013). Tanzania, Mozambique, Ethiopia, Ghana, Cote d'Ivoire, and Burkina Faso comprised the first round of African countries to join the G8 New Alliance (Patel et al. 2015). Today, the partnership also includes Benin, Malawi, Nigeria, and Senegal (New Alliance 2015). Each of these target countries follows what McKeon has identified as five common threads of the New Alliance narrative: modernization and productivism, value chains,

agricultural growth corridors, public-private partnerships, and patient capital (2014). These threads propagate the sadly conventional belief that small farms represent 'backward' and 'unproductive' thinking, (see also Altieri 2009).

Despite these claims, there is mounting research indicating that small farms are in fact significantly more productive than large-scale projects like those promoted by the G8 New Alliance when considering total output rather than a single crop's yield (Altieri 2009). Rural poverty in the region targeted by the G8 New Alliance is severe, with many poor working people there living in extreme poverty – amounting to an income of \$1/day. And we make no mistake that investment in their agrarian futures is necessary to overcome hunger and secure just and sustainable livelihoods. However, what that investment looks like in terms of goods, delivery, and services is what is truly at stake. Eighty percent of Africa's farmland is comprised of roughly 33 million small community and family farms (ibid). And that figure does not account for the diversity of other small-scale food providers in the region – fishers, pastoralists, and forest dwellers. Hence, it is critical to rethink agricultural investment in a manner that is inclusive. Instead of jumping haphazardly from problem to solution, it is critical to first tackle the root causes, as have been outlined briefly in this section.

Reclaiming the debate on agricultural investment calls for several major shifts from conventional narratives. These transformations offer a new triangulation of actors, one that puts small farmers and food producers at its very essence. This re-figuration requires policies that favor public-peasantpartnerships over public-private-partnerships (McKeon 2014). On the flipside of today's mainstream and conventional discourse is a path towards a new agricultural paradigm. In a Transnational Institute Agrarian Justice policy paper, Kay (2014) mapped out the five key characteristics that are necessary to reclaim agricultural investment. Firstly, agriculture in society must be valued, and not only for its contribution to food security. Agriculture also contributes to other important areas, among them wealth creation and employment. Its investment must be met with long-term and sustainable goals that also account for future generations. Secondly, since peasants themselves are the biggest investors in agriculture and produce the majority of the world's food, they are a crucial actor when it comes to outside investment and are also investors in their own right. The third point expands on our notions of investment in and of itself. Investment is not always measurable in tangible assets, but also includes social, intellectual, human, physical, and natural capital. Because of this, outsiders often overlook investments made by peasants in their own communities. Fourthly, agriculture and food are too imperative to the people of the world to be left solely to market forces. As argued throughout this study, human rights – in particular the right to food – must be fulfilled through the active participation of states, including public policy and public investment. The fifth and final point builds on this necessary role of the state by fostering state-society interaction that will mutually boost synergies between the public sector's investments and those contributed by peasants and other small-scale food producers (Kay 2014).

These creative and timely reprioritizations of agricultural investments that benefit grassroots communities of poor rural food producers link back to the structural violence they encounter in the face of projects that scale up (as part of value chains), rather than *scale out* (as part of intricate webs) their land and labor potentials. In Tanzania and beyond, social movements and their allies demonstrate both humility and political sophistication by ushering in a new paradigm that is inclusive of what has become a mosaic of responses – from the grassroots up.

Social Movement Responses: grassroots vision for reprioritizing food and agriculture

Despite claims of a retrograde and disappearing peasantry, there are now more peasants than at any other point in history, making up just under two fifths of the human population (Van der Ploeg 2009; Edelman and Borras *forthcoming*). What's exciting about those swelling numbers is that (trans)national organizing among groups of peasants and their rural food-producing counterparts such as fishers, forest dwellers, and pastoralists is also at a global crescendo. These political reactions 'from below' in the form of transnational as well as local alliances have used legal and extra-legal tools to oppose land and resource grabs that have resulted in both victories and defeats (Hall et al. 2015). Although not the only 'movement of movements', Via Campesina is certainly the largest, and

arguably best organized, agrarian movement defending its members' rights, while at the same time offering radical alternative visions. Today, Via Campesina brings together more than 200 million peasants, landless, Indigenous peoples, women, migrants, fishers, pastoralists and agricultural workers – a group of people spanning 73 countries on six continents in the Global South and Global North (Via Campesina 2015). Our emphasis on Via Campesina and its national members and agrarian, environmental, and food justice allies for the purposes of this research is twofold. Firstly, we see them as a clear channel of influence for rural working communities – especially those affected by large-scale agricultural investment in Tanzania and beyond – to bring both their grievances and solutions to large and powerful actors and decision-makers, including states, corporations, NGOs, and intergovernmental agencies. Secondly, it is the convergence of social movement actors that brought to light some of the concepts we highlight here, most notably food sovereignty and agroecology.

Via Campesina's diverse base currently represents 164 national and local member organizations (Via Campesina 2015). These member organizations are the key drivers of the movement's political stances and reactions, and they depict such a vast span of political realities on the ground. For example, member movements tackle Via Campesina's commitment to agrarian reform from different angles in Latin America, where private property regimes and rich landlords control much of the territory than in Africa and Asia, where land often technically belongs to the state. Complicating this scenario even further is the role of the private sector and leasing arrangements, such as is the case with SAGCOT and the Tanzanian state's encouragement of public-private partnerships. And land access control is just one example of a globalized problem where localized solutions must be protected and promoted. The food sovereignty political project is firmly informed by the local (see especially sections III and IV, 'Localizes Food Systems' and 'Puts Control Locally').

MVIWATA, its Swahili acrostic translating to *Network of Farmers Groups in Tanzania*, is Via Campesina's only Tanzanian member organization. Over the course of its 22-year history, MVIWATA's membership has grown to more than 100 thousand small-scale food producers, with a laudable goal 'to unite small scale farmers (including all smallholder producers whose livelihoods depend on land such as pastoralists and fishers) in order to defend their interests and address together the challenges of farmers'. The network has a repository of cutting-edge projects and programs that they see necessary to achieve such an ambitious goal, ranging from ecosystems and livelihoods, to advocacy and policy dialogue, to practical skills to increase income and access to markets, to food security governance in East Africa (MVIWATA 2015).

MVIWATA's relationship with Via Campesina is one that is indicative of the movement's current prioritization of African leadership in the face of current external and internal threats in the region such as the strong preference for public-private investment under the G8 New Alliance. Via Campesina endorsed and published a policy brief penned by MVIWATA just a year after SAGCOT went into effect. The 2013 paper, titled *Large-scale investment likely to disadvantage smallholder farmers*, foretold with sober concern violations in the form of land grabbing and food insecurity that have since come to pass. That study referenced a flex crop scheme that existing Tanzania legal frameworks made possible as an example of grievances that would multiply without concerted efforts by the state to protect peasants and their natural resources (MVIWATA 2013, summarized in Via Campesina 2013).

Across Tanzania's southernmost border, Mozambican peasant organizers are rallying against their country's own agricultural growth corridors – which are also tightly interwoven into the G8 New Alliance's development policies. The Mozambican Peasant's Union (UNAC), also a member of Via Campesina, has played a headlining regional role and works with MVIWATA in programs that include learning and seed exchanges and policy advocacy. Just days before our arrival to Tanzania for field research, UNAC held its third peasant-organized conference on land in Maputo – bringing food producers from around Mozambique and beyond to discuss concerns and strategies around land and resource grabs in Africa (Tramel 2014). It is no coincidence that Via Campesina chose Zimbabwe and its Zimbabwe Small Holder Organic Forum (ZIMSOFF) as the host of its rotating international secretariat at its VI International Conference in Jakarta, Indonesia in 2013. ZIMSOFF's chairperson

Elizabeth Mpofu now serves as Via Campesina's first female General Coordinator – a farmer herself who is a recipient of Zimbabwe's fast-track land reform program (Edelman and Borras *forthcoming*).

The West African region is similarly strategic for Via Campesina. Its historical work in the Sahel is perhaps best known in international circles through three groundbreaking organizing events that took place in the village of Nyéléni on the outskirts of the dusty town of Sélingué in Mali. The first was a 2007 Forum on Food Sovereignty, where Via Campesina and other agrarian movements joined forces with the transnational environmental movement Friends of the Earth and other allies that included activists, academics, and NGOs. The major policy piece that came out of the Nyéléni Food Sovereignty Forum was the 'pillars of food sovereignty' that shape the theoretical framework of our study (Nyéléni 2007, see also Methodology section). The second event at Nyéléni was the first peasant-organized conference against land grabbing. There, Via Campesina and its allies shared experiences of dispossession and authored Stop Land Grabbing Now as an initial commitment to strengthen organizing around capacity building for local resistance, using legal aid for defense, advocacy and mobilization, and alliance building (Via Campesina 2011). The third gathering at Nyéléni was an international forum for agroecology that contextualized the current global enclosure within the food, financial, energy, and environmental crises and false solutions that would serve foreign and local elite capital rather than rural working people. Its final declaration spells out a vision of agroecology for food sovereignty, control of land, and environmental justice (Via Campesina 2015, see also Section VI, 'Works with Nature').

West African movements associated with Via Campesina have also played a central part in growing the narrative, and current convergence, around land and water struggles. Those involved in that process argue – and we agree – that food sovereignty is impossible without control over land and water. Via Campesina's Malian member organization the National Coordination of Peasant Organizations (CNOP) and close ally Malian Convergence Against Land Grabbing (CMAT) came together with other movements and grassroots organizations from the region to draft the Dakar Declaration (2014) against water and land grabbing at the Africa Social Forum in Senegal in October 2014. That document tilled the soil for the *Declaration of the Global Convergence of Land and Water Struggles* (Global Convergence 2015), which was released at the World Social Forum in Tunis in 2015 with even further input from and participation of food providers in the pastoralist and fishing sectors (Via Campesina 2015b). As part of the global convergence of land and water struggles in Tunisia, civil society organizations opposed to the G8 New Alliance put out a call to their governments to reject it. Among the Tanzanian organizations that signed the call to action were MVIWATA and TOAM, both of whom contributed to the realization of this study (CSO Call 2015).

These convergences represent an exciting new synergy between social justice movements, as well as points of entry for allies to invest in these movements and engage in their work. It is against the backdrop set by an unjust control of land and resources that we attempt to spotlight highly capable and organized small-scale food producers as they provide life-giving resources for their communities and invite us all to participate—as long as we, from the outside, let them call the shots.

Methodology

Study Overview

This study in many ways picks up where an earlier, related study, entitled *Impacts of large-scale agricultural investments on small-scale farmers in the Southern Highlands of Tanzania: a right to food perspective* (Twomey et al. 2015), left off. The first study, in which research was conducted in two districts of Tanzania's Southern Highlands in March 2014, examined the impacts that large-scale agricultural investment projects were having on the right to food of small-scale farmers in surrounding communities. The impetus for that study, as with this one, is that Tanzania is in the midst of what is

planned to be a major transformation in its agricultural sector through the Southern Agricultural Growth Corridor of Tanzania (SAGCOT) investment initiative and related efforts—with major implications for the nearly 80 percent of its population engaged in small-scale farming (World Food Programme 2014; IFAD 2014), as described above. The findings of the first study were overall quite negative, including significant violations of the right to food associated with the particular investment sites examined, and numerous concerns cited regarding SAGCOT, which appears poised to perpetuate, and likely intensify, these violations. The study also found that 'proper protections do not appear to be in place under SAGCOT (or more generally, in the current policy environment in Tanzania) to ensure the most basic conditions necessary for realizing the right to food' (Twomey et al. 2015: 10). Among the conclusions were that 'if SAGCOT were to be carried out in such a way that supported the right to food, it would need to come from a very different starting point. That is, it would need to be grounded in the realities and needs of the small-scale farmers it is purported to support' (ibid). In other words, it was concluded that agricultural investment that actually supports the right to food would require a radically different approach from that represented by SAGCOT.

What the first study stopped short of doing, however, was to address the question of what alternative agricultural investment in support of the right to food might actually consist of. This is the objective of this second study—to offer insights into what types of investment could support the right to food, and what types of investment are already supporting the right to food, of small-scale food providers in Tanzania. Doing so has involved taking a number of approaches that diverge significantly from those of SAGCOT, the G8 New Alliance, and related efforts. This has included a much broader and more holistic understanding of 'investment' than the current narrow mainstream definition, as described above. It has also involved recognizing the small-scale food providers that comprise the majority of Tanzanians as key protagonists in realizing the right to food, and as investors in their own right. Grounded in this context, this paper explores the question of *what forms of investment support the right to food of small-scale food providers in Tanzania*, both by looking at what is already working (and not working) in the field and hearing from food providers what their needs and visions are.

Conceptual Framework: A Right to Food Approach, Informed by Food Sovereignty

This study weaves together the frameworks of the right to food and of food sovereignty to examine alternative investment for and by small-scale food providers in Tanzania. Here we will briefly explain the concepts of the right to food and of food sovereignty, and how, taken together, they inform our analysis. It should be noted that detailed analytical comparisons of food sovereignty and the right to food have been done elsewhere (Windfuhr and Jonsen 2005; Beuchelt and Virchow 2012; Claeys 2015) and this is not our intention here.

The right to food—defined as '*when every man, woman and child, alone or in community with others, has physical and economic access at all times to adequate food or means for its procurement*' (CESCR 1999)—is an internationally-recognized, legally binding framework. It was first enshrined in the 1948 Universal Declaration of Human Rights and later in the International Covenant on Economic, Social and Cultural Rights of 1976, among other legal instruments, both at the international and national levels (Windfuhr and Jonsén 2005; Claeys 2015). At the international level, the right to food is currently a guiding framework of the UN Committee on World Food Security, considered the foremost inclusive government-led global platform on food security and nutrition (Brent et al. 2014). At the national level, the right to food is being incorporated into the constitutions and/or national law of a growing number of countries (Claeys 2015).

As primary duty-bearers under this legal framework, states are required to *respect*, *protect*, and *fulfill* the right to food (De Schutter 2015). *Respecting* the right to food means that in no way should state policies and practices impinge upon it. *Protecting* the right to food means that states must ensure that no entities or individuals violate the right to food of others. *Fulfilling* the right to food means that

beyond these first two basic duties, states are required to proactively and progressively work towards the realization of the right to food. Furthermore, under the right to food framework, food must be *available, accessible,* and *adequate* (ibid). *Availability* refers to there being enough food physically available to obtain either through one's own production/harvesting or through purchasing it. *Accessibility* refers to both economic and physical access to food. It is important to stress here that physical availability of food is not sufficient to prevent hunger if people lack sufficient money or other means of acquiring it. *Adequacy* refers to food being sufficiently nutritious for a healthy diet as well as culturally appropriate.

Former UN Special Rapporteur on the Right to Food Olivier De Schutter has emphasized, as have others, that except for emergency situations, in which the state is required to provide food directly to those who cannot otherwise access it, the right to food is essentially *the right to feed oneself* (ibid). This can be achieved through two main channels—growing/harvesting one's own food and/or purchasing it. In rural contexts, food is generally accessed through a combination of both of these channels, with an emphasis on the former. The issue of access to and control over productive resources such as land and water is therefore an element of critical importance to the right to food.²

A right to food approach starts from the realities of those who are most susceptible to hunger and food insecurity, looking at the factors that are facilitating or hindering their realization of the right to food (De Schutter and Cordes 2011). Furthermore, a major tenet of the right to food approach, as with other rights-based approaches, is the *participation* of rights-holders, meaning that 'that every person and all peoples are entitled to active, free and meaningful participation in and contribution to decision-making processes that affect them (De Schutter 2012a: 6). This is particularly true for populations most vulnerable to violations of their rights (ibid). Therefore, not only are vulnerable populations at the center of analysis in a right to food approach, but they are also considered key protagonists in the development, implementation, and monitoring of policies and programs. According to De Schutter (2014: 18), 'National strategies grounded in the right to food should be conceived as participatory processes, co-designed by all relevant stakeholders, including in particular the groups most affected by hunger and malnutrition – smallholder producers, fishers, pastoralists, indigenous people, the urban poor, migrants and agricultural workers.' De Schutter (ibid: 16) further states that 'Local initiatives informed by social participation will be better informed and therefore more effective in reaching their objectives, and they will result in a more transparent and accountable use of resources.'

Paradoxically, the majority of the world's hungry—approximately three quarters—are those who depend on growing and harvesting food for their livelihoods (De Schutter and Cordes 2011). As the same is true in Tanzania (IFAD 2014), this study therefore takes as its starting point the realities and perspectives of Tanzania's small-scale food providers. The term 'food provider' employed throughout this paper encompasses farmers, as well as pastoralists, fishers, and others who grow, harvest, raise, vend, and otherwise provide food, many of whom are largely invisbilized and marginalized in the current policy setting. Furthermore, this study has sought to do precisely what SAGCOT and related initiatives have been critiqued for not doing—recognizing small-scale food providers as key actors in food and agricultural investment and seeking out their insights and opinions in order to amplify them. We argue that these basic steps are absolutely fundamental where the realization of the right to food is concerned.

Furthermore, this study takes a holistic approach to the right to food, emphasizing that this basic right can only be fully realized when measures are taken by the state, in concert with other actors, to respect, protect and *fulfill* it. Far too often, human rights assessments focus on whether or not existing rights are being violated (i.e., whether or not they are being respected and protected), while overlooking the third, and critical, question of the degree to which rights are being actively fulfilled. That is, states are not only obligated under international law to protect and uphold existing rights, but

² Further details on the access channels facilitating (or hindering) the realization of the right to food are provided in the Twomey et al. (2015) study referenced above.

to proactively take steps toward the (further) realization of rights—hence the term 'the progressive realization of the right to food.' This third component of the right to food, however, is less straightforward than the first two components. That is, what does the progressive realization of the right to food actually look like in a given context? And what would agricultural investment in support of the right to food look like? This gets back to De Schutter's points, highlighted above, about the critical importance of participation by impacted communities in shaping and implementing policies and programs in support of the right to food. We argue that this is where the framework of *food sovereignty*, coming from social movements of small-scale food providers around the world, can be helpful.

Defined in short as 'the right of peoples to healthy and culturally appropriate food produced through ecologically sound and sustainable methods, and their right to define their own food and agriculture systems' (Nyéléni 2007a), food sovereignty is a proposal coming directly from those who comprise the majority of the world's hungry, based on their own processes of articulation and consensusbuilding (Martinez-Torres and Rosset 2010). As related to the theme of this study, we argue that food sovereignty can be viewed as a proposal for investment that supports active realization of the right to food (and associated rights) designed by those most impacted by hunger and food insecurity—those, who, in theory, should be at the center of efforts to realize the right to food.³ Or, to put it differently, we argue that *employing a food sovereignty framework can help to address how the right to food can be fulfilled in a given context and thus can serve as an important tool for envisioning—or re-envisioning—agricultural investment.*

In order to translate food sovereignty from a broad vision into concrete, actionable proposals, social movements of food providers from around the world have jointly developed the following *six pillars of food sovereignty* (Nyéléni 2007b):

Food sovereignty ...

- I. focuses on food for people
- II. values food providers
- III. localizes food systems
- IV. puts control locally
- V. builds knowledge and skills
- VI. works with nature

These pillars, among the outputs of the Nyéléni 2007 Global Forum for Food Sovereignty in Sélingué, Mali, were designed by and for social movements to help them articulate specific plans for action in their respective regions, shaped to their particular contexts (Schiavoni 2009). We have similarly used these six pillars to guide the analysis of this study, to help us explore what agricultural investment in support of the right to food might look like in the Tanzanian context. In the sections to follow, we will provide a general explanation of each of these pillars before exploring in-depth the specific implications of each pillar for agricultural investment in Tanzania.

Lastly, is important to mention that food sovereignty itself remains a contested concept and a source of ongoing debate and dialogue among social movements, and increasingly state actors and academics as well. Indeed, this is part of what has kept the concept fresh and relevant over the past two decades

³ This is in no way to minimize the broader transformative potential of food sovereignty or to position food sovereignty as a mere component of the right to food, but to argue that food sovereignty can serve as a *complementary* framework to the right to food and to provide one example of how this can work. For more on the important tensions and synergies that have existed between the right to food and food sovereignty, which are beyond the scope of this report to cover, see the excellent recent work of Claeys (2015), *Human Rights and the Food Sovereignty Movement*, and also the influential earlier work by Windfuhr and Jonsén (2005), *Food Sovereignty: Towards democracy in localized food systems*.

since it was first launched by Via Campesina onto the international stage in 1996. While we will mention some of these debates and points of contestation where relevant, it is beyond the scope of this study to cover them fully. We thus refer readers to an excellent set of papers on this theme available at http://www.iss.nl/research/research_programmes/political_economy_of_resources_environment_and_population_per/networks/critical_agrarian_studies_icas/food_sovereignty_a_critical_dialogue/

Data Collection

A variety of qualitative research methods were employed in this study, including semi-structured interviews, focus group discussions, and document analysis. In particular, this study is largely informed by field research carried out in October of 2014 by two of the authors, Christina Schiavoni and Salena Tramel of the International Institute of Social Studies (ISS) based in The Hague, Netherlands, in partnership with two postgraduate student researchers of University of Dar es Salam, Tanzania, John Faida and Fatuma Amiri, and members of the farmers organization MVIWATA and the NGO Caritas. The study is also informed by related research on the part of the third author, Prof. Benedict Mongula of the University of Dar es Salaam, and by the prior field research conducted for the earlier related study mentioned above (Twomey et al. 2015). Additionally, data collected in the field was supplemented by a variety of other primary and secondary sources, including government documents, civil society reports, and academic literature.

The field research for this study took place over three weeks in October 2014 in three distinct zones of Tanzania: the Southern Highlands, the Coastal Zone, and Zanzibar. Given limitations of time, the researchers settled upon visiting these three distinct zones in order to explore different of forms of investment in a diversity of settings, without trying to cover too much, which could have compromised the depth and quality of the investigation. The Southern Highlands of Tanzania were selected for their strategic importance as 'the breadbasket of Tanzania' and the area targeted for development under SAGCOT. This was also the area investigated in the prior study by Twomey et al. (2015). The Coastal Zone was selected for its proximity to the major hub of Dar es Salaam and because it is the site of many fishing communities, whose voices we sought to highlight. The archipelago of Zanzibar was selected both because its Food Security and Nutrition Act of 2011 had been singled out by the former UN Special Rapporteur on the Right to Food as a model piece of legislation in support of the right to food, and also because of a strong presence there of farmer-based networks piloting alternative forms of agricultural investment.

To identify the most appropriate sites to visit within each zone, the researchers worked with Tanzanian partners who had longstanding community relationships built over time. Criteria for site selection included examples of innovative forms of agricultural investment as well as promising practices and models with the potential to be strengthened and scaled up/outward through supportive investment. An effort was also made to seek out and speak with a diversity of different types of food providers, including peasants, pastoralists, fishers, and seaweed harvesters in order to paint as holistic of a picture of agriculture investment as possible, within the time constrains of the study. Additionally, given the integral role of women in food provisioning, the voices of women within and across these each of these sectors were specifically sought out. To create an atmosphere in which women food providers could feel comfortable and encouraged to speak up and express themselves, several women-only focus groups were conducted.

A total of 24 interviews and focus group discussions were carried out in a total of 20 different locations. Of the interviews and focus group discussions, 16 were conducted with small-scale food providers at various sites of food production, harvesting, and processing in rural locations. Of these, 13 were focus group discussions (ranging from approximately 10-30 participants) and 3 were open-ended interviews with individuals. An additional 8 open-ended individual and small group interviews

were conducted with key informants representing social movements, NGOs, and government agencies. Further details on the focus groups and interviews are provided in the Appendix.

Finally, there were a number of study limitations that we wish to highlight. First was a limitation of time, as the fieldwork for this particular study was limited to three weeks, although the study also builds upon prior fieldwork conducted in Tanzania, as mentioned above. Another limitation was that of language, as the first two authors were not fluent in Swahili and therefore relied on interpretation for the focus group discussions and interviews in the field. The interviews with key informants from various organizations and agencies were carried out in English. Third, our race and socioeconomic class as researchers were apparent and may have shaped the answers we received. One of the ways in which we compensated for this was to partner with organizations and individuals who had long-standing relationships with the various communities we visited. This enabled us to reach a far greater level of depth and candidness with them than we could have achieved on our own, although their presence could also have influenced the answers received.

And finally, both the first and second authors came into this research as insiders to the food sovereignty movement, having worked with a variety of movements at the global level and in a number of different countries. As laid out by Edelman (2009), this position as 'engaged' scholars in relationship to the movements being studied, while presenting certain challenges, also allows for certain synergies that can increase the richness and relevance of the research. In the field research in Tanzania, pre-existing relationships facilitated access to people and spaces that may not otherwise have been accessed, and allowed key informants to speak with a heightened degree of candor and comfort. The researchers' prior experience as a practitioners also gave them an eye to what information was likely to be of relevance to those actually working toward the right to food and food sovereignty on the ground; thus it is hoped that this paper can be a contribution in that sense as well.

I. Food for People

This first principle of food sovereignty emphasizes the right of all people to healthy, culturally appropriate food and that food should be treated first as a source of nourishment for people as opposed to a commodity for profit. It calls for a shift in thinking away from 'increased productivity' as a goal in and of itself, raising the questions of what food is being produced and toward what ends. As stressed by the former UN Special Rapporteur on the Right to Food Olivier De Schutter, food production does not translate into hunger alleviation if farmers are producing commodities for markets beyond their reach and over which they have no control (De Schutter and Cordes 2011). This helps to explain the paradox that the majority of the world's hungry are in fact those involved in agriculture (ibid), which is also true in the case of Tanzania (IFAD 2014). As related to agricultural investment, this principle of food sovereignty calls for a reprioritization from mass production of 'commodity' crops subject to the instability of global markets to a focus on diverse food crops that support the basic right to food both in the immediate areas where food is produced and in other areas where food is needed.

During the field research for this study, the food providers interviewed described their current challenges in producing and accessing 'food for people.' One common theme we heard, particularly within the Southern Highlands, considered the 'breadbasket of Tanzania,' was an emphasis on maize production without sufficient infrastructure and mechanisms in place to manage the surplus maize, or to guarantee fair and stable payments to producers. Indeed, an abundance of maize was particularly notable in the area in and around Songea while we were there, which was shortly after harvest time. Roads leading to the nearest national grain reserve were backed up with traffic, with one open bed truck after another piled high with bags of maize. Several of the villages we visited had their own stockpiles of maize, which they had not yet managed to sell due to the momentary glut in the market. These stockpiles were out in the open, piled high and covered only by tarps, easily lending themselves to post-harvest loss, which is a pervasive challenge in Tanzania, with rates as high as 40 percent, depending on the crop and the area (Tanzania Markets-PAN 2013a).

While all this maize might seem to imply a situation of food security, the current system is in fact leaving farmers, who make up the majority of Tanzanians, in a highly vulnerable position. Farmers we spoke with complained of low prices when selling to private intermediaries, and complained that while the government aims to offer fairer prices through its National Food Reserve Agency (NFRA), timely payment is a major issue. According to Jordan Gama of the Tanzania Organic Agriculture Movement, some of the farmers he works with had been waiting for payments from the government since the previous year's harvest—which was also mentioned by a number of farmers we spoke with in Songea Rural District. Gama feared that the current glut in maize and associated low prices combined with lack of payments could disincentivize farmers from planting maize the following season, which could then result in a situation of underproduction that threatens food security—in an all-too-familiar cycle.

It turns out that the existing system of maize reserves managed through the NFRA is largely a remnant of the past, from the period of nationalization from the mid-1960s to mid-1980s. During this period,

assumed the state primary responsibility over agricultural production and distribution, from the supplying of inputs to the purchasing and distribution of goods (Bernstein 1981). This was carried out through a variety of government agencies and parastatal enterprises, including state farms, marketing boards, research bodies, crediting agencies, and input suppliers (ibid). Much of this was phased out as Tanzania entered a period of structural adjustment and economic liberalization in the 1980s, which involved the deregulation of private trade in food crops from 1986-1989 and the elimination of

'Markets are a huge challenge. The government's focus on maize was to increase food security, but production has doubled and doubled and now there is too much and no market. Maize production is subsidized through seed and fertilizer subsidies, but we would also like to see support for our vegetable gardens and for alternative crops, like groundnuts, sunflowers, and sesame...This would help farmers to have sufficient incomes to meet household demands, like school fees, etc.'

Focus group discussion, Mbinga, Songea Rural District

pan-territorial prices in 1989, among other measures signaling the withdrawal of the state from matters of food production and distribution (Minot 2010).

While Tanzania continues steadily down the path of liberalization, the state has maintained a limited level of oversight of the country's food supply, including management of national food reserves for their strategic importance. However, as emphasized by Kay (2014: 25), 'public stocks in and of themselves are also not likely to be nearly as effective as when they are combined with other instruments.' In the case of Tanzania, the state is attempting to manage one particular piece of the country's food supply puzzle, while lacking control over many of the other pieces, rendering itself less effective than if it were to take what Kay (ibid) describes as 'a more comprehensive approach towards resilience.' This, combined with constant budget deficits and other challenges, has hampered the Tanzanian state from meeting its necessary potential in the purchasing, storage, and distribution of maize and other crops of strategic importance (e.g., Minot 2010; Kilima et al. 2007; Maro and Mwaijande 2013; Tanzania Markets-PAN 2013b).

While there are many different perspectives as to the best way forward, most of the debates taking place, for instance heated debates over regularly occurring maize export bans imposed by the government (Kilima et al. 2007; Tanzania Markets-PAN 2013b), do not get to the heart of the matter when it comes to 'food for people.' That is, the majority of small-scale food providers whom we heard from *do* want support to grow maize, which is of fundamental importance to the Tanzanian diet, economy, and culture. But they do not want to be limited to producing raw commodities that flow out of their communities and are subject to the price swings of national and global markets. They would like the ability to be able to store, process, and distribute at least a portion of their maize within their

own communities, both for purposes of food security and to be able to obtain more value from what they produce. In the villages of Mlete and Mpandangindo (among others) in Songea Rural District, farmers have come up with their own response to the current challenges associated with maize by turning to the traditional crop of cassava and, with the support of MVIWATA and the Italian NGO CAST, building their own cassava processing plants. These plants are controlled and operated by the farmers themselves and are used for both household needs and income generation. Products include cassava flour, chips, and biscuits. The farmers we spoke with explained that selling these products as opposed to raw cassava enables them to nearly double their profits and keep more money circulating in their communities. In terms of support needed, the farmers said that accessing markets for their products is their main challenge at present. They also said that they see this as a potential model for investment and would welcome further partnerships (in a way that respects their autonomy, they emphasized) for the processing of other foods, for instance tomatoes into sauce and mangoes into juice.

Furthermore, while crops like maize and cassava are of vital importance to food security, these alone do not make for adequate and nutritious diets. Equally vital are other foods such as fruits, vegetables, animal products, marine products, and forest products. In the village of Mbinga Mhalule in Songea Rural District, villagers have greatly improved their food security and nutrition through vegetable gardening and small-scale animal husbandry. They are now self-sufficient in vegetables (including tomatoes, eggplant, onions, and greens) and able to trade surplus vegetables for other food items. The animals are not only a source of protein, but also a critical source of fertilizer for the gardens, which

are free of chemical inputs (see 'Works with Nature' section). To support these efforts, the villagers have started their own community-based microcredit program. А portion of the money generated from the livestock and gardening is saved and those savings serve as microloans that are community-administered.

Farmers use the money for

'It used to be that we needed money to improve household nutrition - we had to go buy greens, carrots, etc. Now that we're all gardening, we have what we need, and we can sell the surplus to get fish, meat, and other products. This has improved household nutrition. We sell the surplus to small shops and other households nearby and at the town center.'

Focus group discussion, Mbinga, Songea Rural District

inputs, production, labor costs, and other needs. In terms of support, villagers expressed a water pump and small-scale irrigation as a priority. As the gardens are entirely rain-fed, basic irrigation technology would allow them to extend the growing season and produce more. They would also like to further diversify their production, for instance through raising poultry and growing crops such as sunflowers and groundnuts. And finally, they would like to be able to market their surplus crops collectively. They feel they have the capacity to produce more, even with current limitations, if their market access were to increase.

Similarly to the inland farming communities we met with, the coastal communities we visited emphasized that they see fishing and other marine-based activities not only as a source of income, but also as an important source of food for their communities. In Kerege, Bagamoyo, for instance, rather than selling most of their fish immediately to intermediaries because they lack their own refrigeration and other infrastructure, as is currently the case, the fishers we spoke with said they would prefer to be able to store the fish and sell it directly to consumers themselves. The members of the pastoralist community of New Ilolo that we met with outside of Iringa similarly pride themselves in the animals they raise not only for the income they generate, but also as a source of food security, as well as economic security, both for themselves and their crop-growing neighbors. Another oft-overlooked component of 'food for people' in Tanzania are wild edible foods that are harvested, mainly by women, through foraging in forests and other areas shared by villagers as commons. In the village of Muwimbi in Iringa District (visited during the previous study by Twomey et al. (2015)), women described how ostensibly 'unused' land acquired by an investor had in fact served as a commons for the village, and an important source of edible plants, mushrooms, and medicines foraged by the village women. After this land was fenced off by an investor, households' nutrition was adversely impacted, according to the women interviewed.

In summary, to support 'food for people' in Tanzania entails a number of important shifts. Systems must be in place to support the production of key food crops of strategic importance at the national level that guarantee fair and stable prices for food providers and adequate storage, supply management, and distribution capacities of the state to ensure a stable food supply that reaches those who need it. At the same time, food providers need support in diversifying their production for the provisioning of food for adequate and healthy diets, starting at the local level. This involves hearing from, engaging with, and *valuing* the food providers themselves, which will be addressed in the following section.

Investment ideas from the grassroots...

- Adequate infrastructure and funding for a properly functioning system of reserves and supply management for crops of strategic national importance, which includes fair and timely payments to producers
- Support (in the form of credit, technical assistance, market access, etc.) for crop diversification
- Support for locally run processing plants to add value to raw products, coupled with support for marketing
- Support for household and community gardens, coupled with small-scale animal husbandry
- In general, support for diverse food production that includes animal products, marine-based products, and forest products, rather than emphasizing mass production of certain foods to the exclusion of others

II. Values Food Providers

This pillar of food sovereignty gets to the heart of why social movements put forward the concept to begin with: the fact that small-scale food providers not only produce the majority of the world's food, but also make up the majority of the hungry and yet are generally denied a place at the decisionmaking table (GRAIN 2014; De Schutter and Cordes 2011; Martinez-Torres and Rosset 2010). In addition to facing exclusion from policy processes that directly impact their lives and livelihoods, they must also contend with structural violence pervasive in the food system, from the grabbing of land and other resources upon which they depend (see 'Puts Control Locally') to social and economic marginalization. Some food providers are not even recognized as such. In the eyes of many policymakers, food provision is associated with a narrow definition of agriculture, and those who fall outside this definition are looked upon as 'backward' and in need of 'modernization.' In some cases, their labor and their socioeconomic contributions are altogether invisibilized. We found in the field, as we heard from a diversity of Tanzanian food providers, including peasants, pastoralists, fishers, and others, that they are no exception to these forms of exclusion. In the face of such challenges, the second pillar of food sovereignty calls for a valuing of those who have been carrying out contextspecific practices of food provision adapted to local ecologies and cultures, with knowledge passed down through generations. Furthermore, it calls for a valuing of *all* food providers, particularly those most excluded and marginalized in the current policy context. What would investment that values food

providers look like in Tanzania? Below is a sampling of perspectives from different groups of food providers themselves.⁴

Pastoralists

Pastoralism, characterized by the use of extensive grazing on rangelands for livestock production (FAO 2001), is a form of livelihood and way of life for several hundred million people across the globe and a main source of food production in the world's drylands, mountains, and cold areas (FAO 2015). Inextricably linked to both culture and ecology, pastoralism is an important means of producing food and other goods in what are often otherwise inhospitable environments, while also providing a variety of ecological services, such as carbon sequestration, nutrient cycling, and habitat provisioning that supports biodiversity (ibid). Despite these and other important functions, many pastoralists face particular challenges related to access to and control over land and other productive resources, particularly given their general reliance on mobility and on communal use of resources to herd livestock over significant geographic expanses (ibid). Furthermore, policymakers and society at large often poorly understand these challenges, and pastoralism as a livelihood and way of life is threatened in many parts of the world.

In Tanzania, pastoralism and agro-pastoralism (pastoralism combined with small-scale agriculture) make up the livelihoods of upwards of two million people and significant contributors to both the economy and food security, supplying, for instance, the majority of beef and much of the milk consumed nationally, among other important food and non-food products (Mollel and Porokwa 2013; IWGIA 2012; Odgaard 2006). In fact, the FAO (2005) has estimated that these sectors contribute 29.5 percent percent of Tanzania's agricultural GDP-amounting to \$876 million. Yet the history of pastoralism in Tanzania is one marred by violence, displacement, social exclusion, and marginalization. This traces back to the colonial period, during which vast tracks of land were set aside as parks and game reserves for the crown, often through the violent displacement of inhabitants (Schroeder 1999). These areas formed the basis for the present-day national park system, which continues to function at the exclusion pastoralists and other populations. Furthermore, displacement continues as parkland and other 'conservation' land-currently comprising approximately 40 percent of the land nationally-continues to be expanded by the government, generally to the benefit of the tourism industry (including tourist trophy hunting of rare animals), international conservation agencies, and other powerful interests and to the detriment of local communities (Benjaminsen and Bryceson 2012).

Part of what makes Tanzanian pastoralists so vulnerable to land loss is a lack of recognition of their customary land rights, leaving much of their land unprotected and unrecognized in the eyes of the state. It is therefore

'Cattle are like a bank. You can sell a cow to pay for school fees, medical needs, etc.'

Focus group discussion, New Ilolo, Iringa District

not uncommon for land used by pastoralists to be designated as unused land and allocated for other purposes, including acquisition by foreign investors (Mollel and Porokwa 2013). The loss of grazing land upon which they depend has a direct impact on the food security and livelihoods of pastoralists. Furthermore, increasing pressure on land and other resources is contributing to environmental degradation, increased encounters with wildlife, and increased conflicts between pastoralists and peasants. These issues tend to be portrayed as inherent problems of pastoralism, while the issues of displacement and land pressures at their core go overlooked. Finally, pastoralism has been largely invisibilized within Tanzanian laws and policies, and where it is recognized, it is treated as a marginal economic activity and a target for 'modernization.' That is, even where pastoralism is recognized, it is generally not supported (ibid). Tanzanian president Kikwete reflected this view in his inaugural speech

⁴ While peasants are among the marginalized food providers of Tanzania (even though they make up the majority of the population), we do not focus on this group in this section, aside from the last part on women, since their voices are thoroughly reflected in the other sections of this report.

of 2005 in saying, 'Our people must change from being nomadic cattle herders to being settled modern livestock keepers.' $^{5}\parallel$

The pastoralists we spoke with in the village of New Ilolo outside of Iringa described how they had come to settle in the area after a series of violent and dehumanizing displacements resulting from the expansion of the Ruaha National Park and an adjacent game reserve, part of which has been under the control of a private investor for trophy hunting operations since 1996. The pastoralists emphasized how the oft-cited tensions between them and farmers are the direct result of poor policies and planning and described the various ways in which these two groups were attempting to overcome their challenges together in their community (while noting that in fact some of the pastoralists also grow crops and vice versa). 'In the past, we used to see each other as enemies,' described one pastoralist. Thanks to a process of dialogue, however, the pastoralists and farmers realized that their common adversary was in fact the game park investor who had grabbed their land, and the state actors who

facilitated it. They have since fostered much more common understanding and 'now we are friends.' For instance, because farmers' generally incomes are connected to the growing season whereas pastoralists can sell their animals at any time in the year, there is an informal credit system in which pastoralists make loans to the farmers as needed and are then paid back in crops. The farmers and pastoralists also

'After we started our own initiative (the irrigation scheme) is when we started changing our lives. We went from receiving food aid form the government to contributing to the government - we have contributed toward a permanent school building, infrastructure for a household water system, and now we are contributing toward building a warehouse... and yet still, pastoralism is not counted as a means of livelihood...'

Focus group discussion, New Ilolo, Iringa District

coordinate to enable the livestock to graze in the farmers' fields after harvest time, which fertilizes the soil while nourishing the animals. The pastoralists also supply the farmers with animal products and plow their fields. Perhaps most notably, the two groups worked together to develop their own irrigation scheme, which has boosted both crop and livestock productivity and eliminated the need for food aid, which they used to receive, and has allowed them to make significant investments back into their community. Some of the youth who had migrated out of the village have even returned, they said, thanks to new opportunities provided through the irrigation.

One common message that we heard in New Ilolo is that, when it comes to investment, pastoralists want recognition and respect for their way of life and their contributions. They said that pastoralism often goes unrecognized as a livelihood and yet makes many important contributions that merit support. One pastoralist explained how 'one cow creates at least 18 different jobs,' such as grazing, milking, selling milk, transport to the marketplace, running the marketplace, branding the animals, permitting, security, transport to slaughterhouse, slaughtering, skinning, meat inspection, butchering, meat transport, meat selling, meat roasting, processing different parts of the animal such as the hoofs, and cleaning. In other words, downward processes in the livestock sector, especially as they relate to pastoralists include water troughs, dip tanks, riverbed protection and slaughterhouses. They also want land use planning in which they are included in order for their customary land use rights to be protected, and adequate social services for their communities. Furthermore, they would like the land that was recently given over to the game reserve investor to be given back. If the land were given back, they said, ongoing conflicts could be resolved, or at least greatly reduced.

⁵ Speech by President Kikwete, on inaugurating the fourth phase parliament of the URT, Dodoma, 30 December 2005. Quoted in IFAD 2012, page 9.

Fishers

Fishing and related activities play an important role in supporting both livelihoods and food security throughout the world, yet are often left out of discussions on investment in food and agriculture. The High Level Panel of Experts of the UN Committee on World Food Security (CFS) describes these sectors as 'a frequently overlooked but extremely important part of world food and nutrition security' that 'have often been arbitrarily separated from other parts of the food and agricultural systems in food security studies, debates and policy-making' (HLPE 2014: 11). Indeed, fish and other marine-based products are important sources of both micronutrients and protein, comprising an average of 15 percent of the animal protein consumed globally, and significantly more in certain parts of the Global South (De Schutter 2012b). Furthermore, an estimated 120 million people depend on fisheries-related activities for their livelihoods (HLPE 2014). Ninety percent of these fishers and marine-based workers are involved in small-scale operations, and the majority of them are based in the Global South (ibid). The former UN Special Rapporteur on the Right to Food has emphasized that that fishing is not only important as a primary livelihood, but is also an important safety net against food insecurity for many farming communities (De Schutter 2012b). At the same time, the world's fisheries are highly under threat, through a confluence of factors including climate change-induced disturbances, overfishing, and environmentally destructive practices (HLPE 2014). Compounding these issues is a growing trend of 'ocean grabbing,' involving 'the capturing of control by powerful economic actors of crucial decision-making around fisheries' and the subsequent 'enclosure of the world's oceans and fisheries resources' by private capital (Pedersen et al. 2014: 3). The small-scale fishers who comprise the majority of the fishing sector worldwide, and other small-scale food providers with marine-based livelihoods, are therefore up against many challenges on top of the general exclusion from food and agriculture-related policy, planning, and investment that they have long faced.

In Tanzania, small-scale fisheries account for 95 percent of the fish catches nationally (Benjaminsen and Bryceson 2012), and directly or indirectly support the livelihoods of up to 4 million people (Ministry of Livestock Development and Fisheries, Fisheries Division, United Republic of Tanzania, cited in Mkama et al 2010). Most Tanzanians in coastal areas live in poverty, while 75 percent of the country's industries operate in those areas (Vice President's Office 2003). The situation in Tanzania largely mirrors the global scenario, in that small-scale fishers comprise the majority of the fishing sector and find themselves on the front lines of multiple assaults to their livelihoods. Among their greatest immediate challenges are declining fish stocks along the coast of mainland Tanzania as well as Zanzibar, posing a direct threat to both livelihoods and food security (Mkama et al 2011; Francis and Bryceson 2000). One likely contributor is the large-scale industrial trawling that has taken place off the coast of Tanzania and Mozambique since the 1960s, operated by foreign-owned companies (Jacquet et al 2010; Francis and Bryceson 2000). These boats drag weighted nets across the ocean floor, which capture everything in their wake, and then non-target species are disposed of as 'by-catch' (Francis and Bryceson 2000). This is both ecologically harmful, as it destroys important habitat on the ocean floor, as well as extremely wasteful (ibid).

Another likely contributor to declining fish stocks is the erosion of traditional management systems within the small-scale fisheries. These traditional forms of management, according to Francis and Bryceson (2000: 86), were highly effective in the past but have largely 'broken down because of pressures from commercialisation, population growth, technological innovations and deterioration of the authority of elders as guardians of management systems (Tobisson et al. 1998).' Benjaminsen and Bryceson (2012) describe how, similarly to the case of the pastoralists, traditional fisheries management systems have been largely replaced with more restrictive and punitive measures in the name of 'conservation,' which severely limit, and in some cases altogether restrict, communities' access to the sea, while benefiting the tourism industry, which is increasingly grabbing up much of the coast. Conversely, Francis and Bryceson (2000) make the case, through rich empirical evidence from both mainland Tanzania and Zanzibar, that fisheries management is likely to be far more successful when communities are involved rather than excluded—adding that this involvement must be in practice and not just in rhetoric, as is often the case. The former UN Special Rapporteur on the Right to Food has shared a similar perspective with regard to fisheries worldwide (De Schutter 2012b).

To hear some perspectives from fishers themselves during our field research in Tanzania, we went to the district of Bagamoyo in the coastal region, about an hour north of Dar es Salaam, where 90 percent of the population relies on the fisheries sector for their livelihoods (Bagamoyo District Profile 2009, cited in Mkama et al. 2011). This is also an area that has seen considerable expansion of the tourism industry in recent years (Gwalema 2013). There, in the village of Kerege, we met with a self-organized group of fishers. They had first organized themselves five years ago at the encouragement

of government officials, under the impression that this would facilitate both their engagement with the government and access to

'We don't want big investment. We want small capital—for better boats, nets, infrastructure, etc. There is a problem with the outside high officials: they don't meet with the grassroots.'

> - Focus group discussion with the fishermen of Kerege, Bagamoyo District

various forms of support. Five years later, however, they were still waiting. Despite the lack of government engagement and support, being organized in a group was helpful to them, they said, in terms of the sharing of knowledge and experiences and also the pooling of resources. When asked, the fishers identified several priorities for investment. First, there is the need for proper infrastructure. The village is not connected to electricity; water needs to be brought in; and its rough roads are only accessible by *bodaboda* (moped). During the rainy season, the roads are often too flooded to make the journey to the nearest town, which is where the schools and medical services are located, so increased access to public services is also essential. Secondly, they are in need of small amounts of capital to support their fishing operations, including improved nets and improved boats that will enable them to safely go further from the shore. Third, they would like to increase their capacity to sell their fish through local markets, as opposed to selling through intermediaries. This will require adequate infrastructure, as their nearest local market is currently lacking in refrigeration, cement blocks, and other such basic elements-and transportation is also a major issue barrier, due to the condition of the roads and their lack of vehicles. Furthermore, they would like the opportunity for training and education, and identified a fishing program offered through a local university that they would like to see made more accessible to fishers.

Women

Across each of the communities of food providers we visited, we found that the women had a particularly substantial role with regard to food provisioning, while facing additional challenges and additional layers of marginalization beyond what we have already described above. This mirrors the situation globally, in which women provide much of the world's food, yet make up 60 percent of the world's hungry (De Schutter 2013). Indeed, women comprise 43 percent of the agricultural labor force in the Global South (SOFA team and Doss 2011) while also engaging in household food production and preparation that often goes unaccounted. While there is no consensus on exactly what share of the world's food is produced by women because of the many difficulties involved in measuring this (Doss 2011), it is commonly estimated that women produce well over half of the world's food, and as much as 80 percent of the food consumed in certain regions (ibid). In addition to producing food, women also bear much of the responsibility for food purchasing, preparation, and the feeding of their families. And yet they face multiple constraints in doing so, from discrimination in land ownership and access, to disproportionately low wages, to discrimination in the workplace, to domestic violence. It is for these reasons and more that the former UN Special Rapporteur on the Right to Food identified gender equality as 'the single most important determinant of food security' (De Schutter 2013: 1). It is also for these reasons that the UN Committee on World Food Security warns that, 'Absent gender analysis, policy can inadvertently have a negative impact on food security and nutrition by further compromising women's roles in the different spheres' (CFS 2011:3) and recommends that 'Long-term investments in the role of women as full and equal citizens-through better nutrition, education, economic, social, and political empowerment—will be the only way to deliver sustainable improvements in food security and nutrition' (ibid).

In Tanzania, women and men spend roughly equal amounts of their time involved in agriculture, while women also spend substantially more time on food preparation, including collection of water and fuel for use in cooking (Fontana and Natali 2008). Women pastoralists also play an important role in livestock keeping (IWGIA 2012). Regarding fisheries, Tanzania reflects the global reality in which the majority of harvesting is done by men (with some exceptions in Tanzania – see Porter et al. 2008), while much related activity, such as processing and local trading, is done by women (Porter et al. 2008; HLPE 2014). And yet, despite their critically important role in food production and provisioning, there is little indication of a gender-sensitive approach to investment underway in Tanzania, and the many specific challenges facing women often go unaddressed. We therefore made a point during our field research to seek out the voices of women to find out what investment means to them.

In the farming community of Utengule, in Iringa rural district, we met with a group of 27 women, the

Amani Group (*amani* meaning peace in Swahili), who were very proud of what they had accomplished together over the past ten years. After initially receiving some livestock and some training from the NGO Caritas, the women were able to pool their resources to create their own microloan system. They grant each other small loans for up to three months, which they then pay back with agreed upon interest rates. Through this all women-run program, one member has

'Together, we have been able to access things like inputs, medicines, and bicycles. The men are impressed by this, and maybe even a little jealous. Some of them would even like to join our group.'

> ---Focus group discussion with the Amani ('Peace') women's group in Utengule, Iringa District

opened her own shop selling staple foods; another runs her own fish market; and another has her own *kanga* (fabric) shop. Significantly, two out of these three local enterprises mentioned directly support community food access. The group also shares a three-acre demonstration plot on which they grow peas, maize, and sunflowers. They sell their harvest collectively within the community, even with challenges in market infrastructure and low prices for maize. Their involvement in the Amani Group, they say, has made them feel more empowered; has helped them to buy things they couldn't previously afford like medicines, agricultural inputs, and bicycles for transportation; and has shifted gender dynamics in their homes. They emphasized that given how much they have been able to accomplish with so little, imagine what they could do with larger amounts of credit. Visions include further expanded and diversified livestock production that includes cattle (as they currently tend pigs, chickens, and goats) and a larger store to support local economic development. To do this, they are in need of additional capital and also of support in marketing. The women highlighted that this is the kind of investment their community needs, not the type where investors come take over the land, explaining 'There's no (extra) land here – it's taken!'

While empowerment of women such as what we witnessed in Utengule and elsewhere is certainly key, we also witnessed that this is not enough without attention to the broader economic structures in place. This could not be more apparent than in the village of Pongwe on the eastern coast of Zanzibar, where we met with a women-run collective of seaweed growers whose name in Swahili translated to 'You think we're not able...' The women had come together, they explained, to 'fight poverty and to have a common voice.' They had seen seaweed farming, which was introduced to their area two decades prior, as a viable form of income diversification (they also participate in small-scale vegetable gardening and animal husbandry) that would provide them with steady markets, as seaweed was high in demand by foreign companies for products such as toothpaste and food additives. On several levels, they had done quite well. They maintain thriving seaweed gardens with good harvests (which had required their investment in equipment such as ropes and stakes), which they proudly took us to see; they maintain their own space that functions both as a storage area for harvested seaweed as well as a

meeting space; and they operate as a well-functioning collectively run group. Moreover, they are engaged in other activities together, such as a small-scale livestock project supported by IFAD. Their greatest challenge, which they felt they had little control over, was the very low prices they received for their seaweed. They explained that they sell their seaweed to intermediaries who sell to the foreign companies that set the prices.

What we heard from the women of Pongwe echoed the findings of Bryceson (2002: 6), who, in his research on seaweed harvesting in Zanzibar, concluded that 'multinational corporations cynically commence with attractive prices paid to producers, but then lower them when they consider that they have made people sufficiently dependent upon such income.' In theory, the seaweed harvesting in Zanzibar may have certain potential as a form of of investment, but with the absolutely essential element of fair pricing missing, it instead risks feeding into cycles of dependency and poverty. This is just one example of the critical role the state has to play in regulating private sector investment—to ensure fairness and uphold the rights of the food providers involved, particularly when they represent already marginalized groups.

In summary, investment that values food providers is investment that starts from their realities, supporting and strengthening their ability to feed themselves and their communities and to undertake the new endeavors that they envision. Furthermore, this investment must go hand-in-hand with supportive and inclusive national policies that recognize the many contributions of Tanzania's diverse food providers, as well as the specific challenges that they face. This can best be achieved by genuine and meaningful inclusion of food providers in the development and implementation of policies that affect their lives and livelihoods.

Investment ideas from the grassroots...

- Full recognition of peasants, pastoralists, and fishers —and women within and across each of these sectors—as food providers, as well as investors in their own right.
- Support for irrigation, as well as riverbed conservation, in both peasant and pastoral communities
- Full recognition and protection of pastoralism as a livelihood in Tanzanian law, with provision of infrastructure to support the pastoralist community such as dip tanks and animal processing facilities
- Infrastructure to support fishing, both in the form of fishing equipment (adequate boats, nets, etc.), as well as storage and refrigeration for local marketing
- Support for women-run local enterprises (through greater access to credit, education, technical support, etc.)
- Equitable, gender-sensitive approaches both to investment and policymaking (e.g., full resource rights for women)
- Fair terms of partnership between private investors and food providers, not left to the investors' discretion, but regulated and enforced by law
- Clear and accessible mechanisms for food providers to have a voice in both investment and policy-making

III. Localizes Food Systems

This third pillar of food sovereignty deals with shortening the distance between food production and consumption, strengthening local markets, rebuilding local food economies, and increasing the capacity of communities to produce, distribute, and consume their own food. While localization should not be treated as a panacea for food sovereignty or the right to food (Robbins 2015; Goodman et al 2012), it can be an important strategy, when employed in tandem with others mentioned here, for a variety of reasons. First, it does not imply a rejection of trade at the regional, national, and international levels, but simply challenges the phenomenon of 'producing what we don't consume and consuming what we don't produce' (cite). More specifically, it challenges cycles in which wealth and resources are extracted from rural communities, often to feed into global fuel/feed/fiber complexes and/or to provide luxury items to wealthy consumers elsewhere. Through such cycles, communities that once had the capacity to feed themselves come to depend on food from external sources, which threatens their right to food on a variety of levels. Perhaps most significant is that food providers become doubly susceptible to the fluctuations of national and global food pricing. That is, when they receive low prices for what they produce, as is often the case, they may not have sufficient incomes to purchase the food they need, while, on the flip side, when retail food prices are high, purchasing adequate food may become prohibitively expensive. This is in essence what was seen on a macro level during the food price crisis of 2007-08, which caused the number of hungry people in the world to swell to approximately one billion, the majority of whom were food providers from rural areas (De Schutter and Cordes 2011). One of the many contributions of local food systems is that they can help to buffer communities from frequent food price volatility, cited as one of the major contributors to recent food crises (HLPE 2011).

Another benefit of local food systems—which economist Ken Meter says are shorthand for 'community-based food systems' (FairShare CSA Coalition 2012)—is that they contribute to local economic development by keeping money and other resources circulating within communities. According to Brian Halweil of the Worldwatch Institute:

(*R*)ebuilding local food systems might offer the first genuine economic opportunity in farm country in years, a pressing need in view of the huge amounts of money leaking out of rural communities. To the extent that food production and distribution are relocated in the community under local ownership, more money will circulate in the local community to generate more jobs and income....In West Africa, for example, each \$1 of new income for a famer yields an average income increase to other local workers in the local economy, ranging from \$1.96 in Niger to \$2.88 in Burkina Faso. No equivalent local increases occur when people spend money on imported foods. (Halweil 2004: 54-55)

Halweil's important point about the multiplier effects of local food is perhaps epitomized by the point of the Tanzanian pastoralist cited in the prior section ('Values Food Providers') about a single cow, when raised under traditional pastoral systems, contributing to many different means of livelihood. Similar is true of fisheries, in which 'about three times as many people (especially women) work in pre- and post-capture and farming activities than work in the actual capture and farming of fish' (De Schutter 2013: 11). The multiplier effects of community-based small-scale fisheries are particularly high. According to a report commissioned by the UN Committee on World Food Security, 'for one million dollars invested, large scale fisheries generate between 3 and 30 jobs, and small-scale fisheries between 200 and 10,000' (HLPE 2014: 58). As related to investment in food and agriculture, then, the third pillar of food sovereignty calls for a reprioritization of investment to support food providers in meeting their communities' food needs to the greatest extent possible while creating jobs and generating wealth that can be reinvested back into the communities from where it originated.

In Tanzania, we witnessed many examples of efforts to build local food systems that are having tangible impacts on both the right to food and local economic development. Some of these have already been mentioned above, such as the cassava processing plants in Mlete and Mpandangindo; the

household and community gardens in Mbinga; the women's group that had opened several food community outlets in Utengule; and the pastoralists building systems of cooperation with crop growers in New Ilolo, among others. Another example not yet mentioned is the village of Ikongosi in Mufindi District, where the community is engaged in collective efforts in both crop farming and livestock keeping. Through such efforts, the village is self-sufficient in food and has enough surplus both for bartering with a neighboring village in exchange for goods such as pottery as well as vending (collectively) at the market in the nearby town. These successes are

'We don't want the type of investment that requires large amounts of land. We consider this (the community-run cassava processing plant) to be a good model of investment. (An investor) could come here, see what the community needs, and cooperate with the community – for instance, in the construction of another processing plant for another product. But not to change our production – to be able to process what we are already producing in our village – and then leave the machinery in the hands of the villagers...'

- Focus group discussion, Mpandangindo, Songea District

in large part thanks to the work of several farmers groups in the community, one of whom we met with. In addition to sharing their many successes, they shared their challenges, which include storage, marketing, pricing, and transportation. They would also like to expand and diversify their livestock production.

Another example is in the fishing village of Kerege, where in addition to the fishermen described above, we also met with women who purchase a portion of the fish from the fishermen and sell it back to them cooked (in just one example of the many jobs indirectly supported by community fisheries). These efforts, and many like them, are happening informally, without external support, but the women emphasized how even a little support could go a very long way towards strengthening the local food system. For instance, they would like to expand their operation and to be able to extend their customer base beyond the fishermen, but are currently lacking capital and transportation. They said that even small amounts of credit could help them to achieve some of their goals, which corresponds with what we had witnessed with the community-based credit systems in Mbinga and Utengule.

This gets to an important point about the realization of the right to food. There are countless efforts already underway at the community level that are moving forward despite a lack of official support and a difficult policy environment (see examples of seed and land laws in 'Puts Control Locally'). Efforts by the state to support the right to food therefore need not start from scratch, but could and should start from the many existing initiatives underway—initiatives that are already feeding people and supporting livelihoods—which could be even more effective if adequately supported. One appropriate starting place is the provision of credit and basic infrastructure. Such support would not necessarily require a major infusion of funds, but rather quite modest amounts which could nevertheless have major multiplier effects within the communities, as we have seen in a number of cases.

Another example of a local initiative which holds much promise if it were to receive an adequate level of support is the Chauru Cooperative in the village of Visezi in the coastal region. This site has a particularly interesting story behind it, as the nascent rice growing cooperative now there is built upon the crumbling infrastructure of what used to be a nationalized agricultural production site of the former National Food and Agriculture Corporation (NAFCO) from the 1970s through the 1990s. After

it was left abandoned for a number of years, the central government made the land available to local people, and the Chauru Cooperative was officially founded in 2002. Today, 894 members share 3029 hectares. Farming is done on individual plots, but members pool resources for inputs, machinery, and infrastructure, which they share. Sales of rice (and other products) are also conducted individually, but the cooperative members we interviewed explained that this is because they lack organization and infrastructure to sell collectively, as is their ultimate vision. This is critical, they explained, because right now the intermediaries whom they sell to individually are able to push down the prices. By selling together, they believe they will be able to have 'a single voice' and more power to demand fair prices. Their vision also includes proper storage infrastructure so that the cooperative will be able to buy rice from its members at harvest and sell it over time, rather than selling it all at once during harvest when prices are lowest. Such a model is already being successfully piloted by farmers' organizations elsewhere, such as by the national farmers movement CNOP in Mali (Paget-Clarke 2011).

While the government provides the land access to the Chauru cooperative free of charge, along with limited support such as one agronomist and one irrigation specialist, investment in the cooperative is quite limited thus far. The members, however, are very clear regarding what support they need in order for the cooperative to thrive. First, to support productive agriculture, the current antiquated irrigation system remaining from the days of NAFCO is in need of repair, and some of the plots are in need of leveling for proper water distribution in the rice paddies. The cooperative also needs better access to inputs and to machinery both for planting and harvest. They would also like support in diversifying their production, including integrating livestock into their operations. In addition to support for production, the cooperative is also in need of storage facilities, as mentioned above, and milling equipment (some of which they already have left over from the days of NAFCO, but is in need of repair) and other equipment for processing so that they can add more value to what they produce. Additional needs include transportation, health services (they have a dispensary building on site, but it is currently empty), safe drinking water, and better access to information, education, and technical support.

In many ways, the very clear visions of the Chauru cooperative echo the conviction of Olivier De Schutter (2014: 15) that: 'Local food systems can be rebuilt through appropriate investments in

infrastructure, packaging and processing facilities, and distribution channels, and by allowing smallholders to organize themselves in ways that yield economies of scale and allow them to move towards higher-value activities in the food supply chain.' De Schutter also makes the point that building local food systems is not simply about action at the local level, but also about supportive national strategies. For instance, local procurement policies in which food for schools and other public institutions is purchased directly from local producers by the government can go a long way toward supporting local food systems (Halweil 2004; De Schutter 2014). And finally, as was emphasized in the previous section, such national strategies should be informed by the participation of food providers (ibid). Indeed, as the members of Chauru and the many other sites we visited demonstrated, Tanzania's food providers have no shortage of ideas and wisdom to share when it comes to building and strengthening local food systems, if only given the opportunity.

'What we need are processing industries for what we produce. For instance, a processing industry for tomato sauce from our tomatoes or for mango juice from our mangoes... so that we can produce and then process and then sell, both locally in the Songea region and beyond.'

> - Focus group discussion, Mpandangindo, Songea District

Investment ideas from the grassroots...

- Support for the formation and strengthening of cooperatives, in the form of capital, training and technical assistance, and marketing support
- Local storage infrastructure for community-controlled systems of reserves
- Infrastructure for the processing and distribution of food locally
- Support for local markets, including infrastructure and transportation to connect producers and customers
- Support for locally-operated food retail outlets such as food carts, shops, and restaurants

IV. Puts Control Locally

As detailed in the previous section, food sovereignty depends heavily on localized food systems where food providers and consumers work hand in hand to feed their communities. The forth pillar of food sovereignty builds on that base by further correlating control of local food systems with access to and control over natural resources. It is further directed by a strong rejection of the commodification of nature through the privatization of natural resources-whether through legislation, business contracts or intellectual property rights regimes. By putting control locally, food sovereignty is inextricably linked to local management of resources: land, territory, water, seeds, grazing, livestock, and fish populations. In other words, a right to food approach guided by a food sovereignty framework hinges on natural and traditional resource rights and the state's responsibility to protect those rights. Increased attention to traditional resource rights as a concept emerged in the 90s to expand upon and rethink intellectual property rights in a manner that coincides with the protection of Indigenous communities' own natural, intellectual, and technological resources (Posey and Dutfield 1996). This conceptual framing lends itself to the very purpose of this study: rethinking agricultural investment through prioritizing local knowledge and alternatives. The forth pillar of food sovereignty calls for the necessity of local communities to use and inhabit their own territories, recognizing that those territories often traverse geopolitical lines. Hence, cross-border interactions among food providers in different areas and representing different sectors are critical to realizing food sovereignty and resolving conflict with authorities. These cross-border interactions are not to be confused with those promoted by trade liberalization. Rather, they are indicative of the kinds of exchanges that are taking place between diverse groups of food providers such as crop growers and pastoralists (see 'Values Food Providers'), horizontal learning exchanges among similar groups such as farmers in Zanzibar and on mainland Tanzania (see 'Builds Knowledge and Skills') and regionally through the work of social movements such as the Via Campesina. Throughout our time in Tanzania, we witnessed the positive work of a wide variety of small-scale food producing stakeholders along these lines despite serious violations of their resource rights.

Tanzania, like many of its sub-Saharan African and Global South counterparts, is no exception to the interplays of flows of capital accumulation and resource allocation. Some stem from the colonial era while others attempt to mitigate the interrelated nature of recent global crises. Putting resource control locally as it relates to food sovereignty starts with not only access to, but also control over, land and seeds. Throughout Africa, seeds and the lands in which they grow are increasingly privatized in step with the policies of the G8 New Alliance for Food Security and Nutrition (Via Campesina and Grain

2015). As one of the first ten African target countries, Tanzania is required to revise its seed and land tenure laws in order to receive its share of the nearly \$1 billion earmarked by corporations that include Monsanto, Syngenta, and Yara under the New Alliance. These changes in local laws are part of incentives meant to lure and protect investors (ibid).

It is no coincidence that in 2012—the same year the G8 alliance was launched—Tanzania made drastic changes to its seed law. Previously, the country had agreed to the conditions of the International Union for the Protection of New Varieties, specifically UPOV 91, also known as 'Monsanto Laws' (cite). Under UPOV 91, large-scale agricultural corporations are able to file patents for seeds—making it illegal for peasant farmers to save them. As a key component of the Green Revolution's original foundation, UPOV 91 works parallel to the Plant Variety Protection Act deems certain forms of seed saving as fraudulent. Alarming and detrimental as these policies can be to the livelihoods of small-scale farmers, the 2012 changes bring further cause for concern. By planting, saving, and even exchanging 'protected' seeds, peasants are now subject to criminal instead of civil law—meaning that in addition to paying fines, they could face imprisonment (Via Campesina and Grain 2015: 18).

Since these new seed policies are still in an implementation phase, many local farmers are unaware of their dangers. Caritas Songea coordinator Brito Mgaya explained that the legislation was quickly unfolding now, citing the fact that just one day before our office visit a related breeder's protection bill was passed into legislation. Mgaya said that most peasants at the grassroots level did not know about these political interactions that take place in the big cities such as Dar es Salaam, Morogoro, and Arusha. He also mentioned that NGOs—even international ones like Caritas—feel largely left in the dark about the changes taking place, which are happening quickly and without broader public consultations. Caritas staff and project participants raised parallel concerns about ammonium sulfate fertilizer, widely promoted by multinational corporations, that is detrimental to the soil and its acidity levels. Mgaya added that these components are all part of SAGCOT and the G8 plan. While farmers understandably only want to buy seeds once (if they have to buy them at all), agribusiness corporations necessitate that they replenish their stocks each planting season. Caritas strongly encourages the establishment and protection of traditional seed banks and crop diversity in rain-fed agriculture as part of their greater programmatic work around vegetable gardens and other forms of crop growing as well as animal husbandry.

For example, in Mbinga Mhalule, a group representative of 624 households see themselves as a 'union of groups' loosely supported by Caritas. Some are engaged in animal husbandry while all are active in gardening projects (see 'Food for People' section). They grow greens, tomatoes, onions, and eggplant, free of chemicals, and are consistently looking to diversify their crops and phase out costly inputs. As Tanzania's seed laws further roll out, Caritas and groups like this one will redouble efforts to protect control of seeds. As part of this work around seeds, Caritas promotes lobbying and advocacy on saving native seeds. They see it as an integrated rural development program that includes gender and economic activities. Project participants learn to save seeds for at least five months, and many told Caritas staff members that the local sustainable seeds indeed last considerably longer than industrial varieties.

In semi-autonomous Zanzibar, seed legislation similar to that in Tanzania's mainland has not yet taken hold and many leaders from MVIWATA are determined to see that it stays as such. Zanzibar is also home to the 'Food Security and Nutrition Policy', a piece of legislation highly promoted by former UN Special Rapporteur Olivier de Schutter as a model food policy, that was developed in a highly participatory way, but remains largely unfunded. 'We have better policies than any country in the world,' said MVIWATA's coordinator in Zanzibar, 'But our problem is popular education and implementation.' What MVIWATA has accomplished today with extremely limited resources is quite impressive. Throughout Zanzibar's two major islands Unguja and Pemba, MVIWATA members have established a network of home and community vegetable gardens that serve as small-scale agroecological oases ('Works with Nature'). These plots of land not only take care of household needs, but also serve as pilot demonstrations for projects to come for the current groups and others as MVIWATA expands its work in the greater vicinity. Project participants pride themselves on simplicity and sustainability—just the smallest amount of investment could multiply these projects throughout Zanzibar and spill into the rest of Tanzania through advocacy and horizontal learning exchanges (see 'Builds Knowledge and Skills').

While MVIWATA works to educate its farmers across Zanzibar, forces aligned with the government on the mainland are working to change them— perhaps most notable in harmonizing the seed laws. Of five thematic areas addressed by the Alliance for a Green Revolution in Africa (AGRA), an initiative of the Bill and Melinda Gates and Rockefeller foundations favoring private sector agricultural investment, seeds are its first priority. An AGRA representative explained to us that AGRA is examining the seed industry as a whole and that the seed act of 2003 did not go far enough in bolstering business efforts. He said that AGRA works on seed multiplication and for private company use in order to build private sector participation and that Tanzania has yet to fully liberalize. To do that, AGRA is attempting to convince farmers that they need new seeds. He and his colleagues believe that Tanzania holds the potential to become a regional export powerhouse, and that Kenya and South Sudan in particular should expect to be fed by Tanzania, with SAGCOT addressing emerging market demands. With Tanzania's integration into the G8 Alliance, he said that AGRA is trying to support the passage of similar seed legislation in Zanzibar. If Zanzibar doesn't harmonize its policies with mainland Tanzania, he explained, the country will fail to fully harmonize its own policies with its Eastern and Southern African counterparts.

Similarly, rural working people in Tanzania have noted shifting policies in relation to land administration. In very generalized theory, Tanzania's land legislation protects access to land for its people—especially those dwelling in the countryside. The 1995 National Land Policy aims to 'promote and ensure a secure land tenure system in Tanzania that protects the rights in land and resources for all its citizens' (United

'If an investor comes and wants to give us a dispensary and take our land, they can keep their dispensary and we'll keep our land.'

Focus group discussion, Ikongosi, Mufindi

Republic of Tanzania Prime Minister's Office 2013: 13).' Just a few years later in 1999, Tanzania implemented the Land Act and Village Land Act, dividing tenure into three categories: general land, reserved land, and village land (along with an outlying category of hazardous land). Village land, falling under the management and jurisdiction of a registered village, is the most common of these categories due to Tanzania's majority rural population and offers the most protection for smallholder farmers and other food providers. Yet even so, most villagers do not possess certificates of title. And in cases where they do carry titles, the Commissioner for Lands can override the village management system and change land categories altogether (ibid).

These political ambiguities have helped pave the way for large-scale land acquisitions in Tanzania, where the cash-strapped and increasingly neoliberal government leases vast swaths of prime agricultural land to foreign investors for up to 99 years. Such is the case with SAGCOT, sweeping across the country from the Zambian border to the Swahili fishing villages dotting the Indian Ocean coastline. To add insult to injury, Tanzania is under pressure from the G8 New Alliance to remove existing safeguards in its land tenure system to further facilitate investors and their financial interests. Caritas Songea representative Brito Mgaya indicated that just as the seed laws had been rapidly unfolding and with little transparency, there is reason to believe that the same will happen—or is already well underway—with the land laws.

In summary, the right to food in Tanzania is unrealizable without access to and control over natural resources—and that starts with land and seeds. If these precious resources slip through the fingers of the rural working peoples whose lives and livelihoods depend on them, there is little hope for realizing

greater territorial rights through managing diverse interconnected food systems such as farms, fisheries, and grazing lands.

Investment ideas from the grassroots...

- Rural (it won't let me add a comment here, but perhaps popular education? Or education at the grassroots level?) education around existing laws pertaining to resource control, including the role of the state, private sector, and transnational public-private partnerships such as the SAGCOT program
- Support for lobbying and advocacy for both detrimental and positive legislation in Tanzania
- Attention to local resource management, including land, territory, water, seeds, grazing, livestock, and fish populations
- Protection of indigenous seeds and territory through seed saving and exchanges
- Global partnerships that support social movements and local organizations' ability to research and disseminate information
- Advocacy and education of Global North allies, particularly those in G8 countries, around their role in resource control in Tanzania

V. Builds Knowledge and Skills

The fifth pillar of food sovereignty provides numerous building blocks to creating and maintaining strong localized food systems that focus on food for people while valuing food providers. By building knowledge and skills, food providers and their organizations are able to solidify their management of food production and harvesting systems and pass that wisdom to future generations. Many of these forms of production are rooted in agroecological small-scale farms, artisanal fisheries, and traditional grazing lands. Food sovereignty emphasizes the local, and in the case of building knowledge and skills, that moves away from one-size-fits-all policies and practices. It is the polar opposite of corporate, state, or even NGO initiatives that assume uniformity among the people who benefit from (or are subsequently disadvantaged by) them. The homogenization of ecosystems compromises this fifth pillar of food sovereignty by creating dependency and interrupting the transferal of knowledge and skills.

Scientists have confirmed agroecological practices biologically diverse and profoundly 'knowledge intensive', interlacing the entirety of peasant, pastoralist, and fisher societies (Food First 2015). Taking this into account invites those concerned with promoting alternative agricultural investment rooted in food sovereignty to carefully examine the local through its traditions and practices as well as its unique ecological systems. Our field research in Tanzania allowed us glimpses into several distinctive settings. Following is what we heard from diverse groups of food producers as to what knowledge and skills look like in their communities, and what needs to happen for them to bring their potential to fruition. Common themes—especially the value of horizontal learning exchanges and appropriate technology—emerged, knitting our findings together in terms of what is working and in need of additional support.

Horizontal Learning Exchanges

The families in the community of Ikongosi (see also 'Localizes Food Systems'), where two tribes live

and work hand in hand, are self-sufficient in food. Today, some neighboring villages even come to Ikongosi to supplement their own agricultural needs. Getting to this point consisted of learning exchanges of varied scales. Before Ikongosi's community group established, farmers engaged in was agricultural production and animal husbandry on their own. Since they have worked together as a group, they note

'Working in groups has made life easier. We can sell together as a common market, and share information, extension, and other services.'

- Focus group discussion, Ikongosi, Mufindi

increased performance through knowledge sharing, as particular skills within the village are diverse. The group meets weekly to grow crops together, and then market their harvests collectively. Although the farmers of Ikongosi work with a wide variety of crops and livestock, they have chosen to zero in on Irish potatoes as the main crop of their one-acre demonstration plot. There, they dig deeper in knowledge sharing—working with the local university and with extension officers on best agricultural practices in potato cultivation. Income generated from that project belongs to the group, who decided together to put the money towards more collective plots. The group's current chairperson said that he used to work in large-scale farming operations, and deeply appreciates what his community is doing locally. The big farms, he said, relied mainly on outside employment, thus only benefitting the outsiders. On the other hand, the projects that are taking place in Ikongosi are conducive to the village as a whole—most importantly protecting the land for the next generation.

In the Kilolo district's Utengule village, the Amani women's group has not only set up an impressive savings and lending system, but also collectively manages a three-acre demo plot where they grow peas, maize, and sunflowers (see 'Values Food Providers'). The women of Utengule have drawn inspiration from one another through their networking and capacity building, and have solid visions for what they could do with expanded access to credit. The Amani group is yet another example of the potential of knowledge and skill building through dynamic horizontal group processes.

According to the fishers in Kerege (see 'Values Food Providers'), fisher groups are a platform for sharing knowledge and experiences-yet there are currently only five groups for Kerege's approximately 500 fishers. Those fishers who are self-organized are actively recruiting for existing groups and encouraging more group formation. For those who do not have the support of groups, it is a double hex as Kerege and many other coastal villages are largely off the radar in terms of government support. Kerege is off the electric grid, and its people must go elsewhere for public services such as education and health care while water has to be brought in. Some of the villagers we met with thought that this may be due to the fact that the Tanzanian government, in partnership with the private sector, has its eye on the Swahili beach town for tourism development or have other ideas in the area. They said they have seen it happen in neighboring villages. Deep-water fishing is not possible in Kerege, because of poor local infrastructure. They pointed to better-equipped boats, education, and refrigeration as their most poignant needs. In terms of education, there is a local fishing college in nearby Bagamovo with its own deep-sea fishing boat. Many pointed to the school as a success story-its students often pursuing captain's licenses and permits while at the same time being able to access the boat that increases the quality and quantity of their catches. That college offers a three-year diploma for a tuition fee of 700,000 Tsh (around €280), and many fishers dream of completing these courses.

Another important horizontal learning exchange (see 'Values Food Providers') is that taking place in lands that are used by both pastoralist and crop growing farming communities. Tensions between those groups have been exacerbated by poor land use policies at the local, regional, national, and transnational levels. Even so, in the village of New Ilolo, the pastoralists and farmers are settling those disputes as part of their own visions of land use that will ultimately benefit both communities for generations to come. One example is the previously cited informal credit system in which pastoralists grant loans to farmers and are in turn paid back in crops during harvest season. Additionally, some

farmers invite pastoralists to let their cattle graze on their lands post-harvest—nourishing both the animals with plants, and the soil with manure. One pastoralist organization created a union of pastoralists that works at various levels: village, district, zone, and national. The local NGO TAGRODE (Tanzania Grass Roots Oriented Development) has supported this process. A clear inroad for alternative investment could be to support horizontal learning exchanges between this union and peasant farming movements such as MVIWATA in joint work on land use and food sovereignty.

Social movements and grassroots organizations that promote food sovereignty and other forms of alternative agricultural investment are intricately organized across various levels (see Background, Social Movement Responses). MVIWATA, a member organization of Via Campesina, has participated in the international movement's activities at the global level while maintaining its autonomy in both mainland Tanzania and Zanzibar. In Zanzibar, MVIWATA coordinating staff explained to us that they were in the midst of writing up a strategic plan, emphasizing youth, with their members on the semi-autonomous region's two main islands. In addition to income and livelihood generation projects, MVIWATA sees its role as a bridge-builder. 'We educate our farmers to know their rights,' explained the movement's Zanzibar coordinator, 'And we join them with other institutions and their leaders.' In other words, MVIWATA Zanzibar self-identifies as a link between small-scale farmers and government officials. At the same time it promotes the exchange of ideas between farmers. A recent example is new knowledge and practice of small-scale aquaculture, which MVIWATA Zanzibar farmers picked up on the mainland in Dodoma from other MVIWATA members. MVIWATA believes in the power of advocacy, its members in Zanzibar pushing for education around and implementation of progressive policies such as the Food Security and Nutrition Act. On the other side of the coin, in Tanzania's Southern Highlands, MVIWATA's education and advocacy are about reversing detrimental policies like those of the G8's New Alliance that are making projects like SAGCOT a feasible reality. MVIWATA members also have the opportunity to network and participate in learning exchanges with other peasant movements under the umbrella of Via Campesina. As noted, Africa is a strategic priority for the global movement that recently moved its international secretariat from Indonesia to Zimbabwe. Powerful movements in countries like Zimbabwe and Mozambique can be great sources of knowledge and skills, while MVIWATA is able to offer its own Tanzanian experience in an African-led and organized context.

Appropriate Technology

Throughout Tanzania, the farmers, fishers, and pastoralists we met with indicated that in areas of large-scale agricultural investment, funds almost always benefit the investors themselves while these rural working people were merely regarded as potential labor or a surplus population. Yet, many of them (detailed in this subsection) maintain food-producing projects with untapped potential. With even a little support, many said, their efforts could be multiplied in ways that lifted up families and entire communities.

Farmers connected to MVIWATA in Zanzibar, for example, are constructing greenhouses to protect their tomatoes from rain and pests. Greenhouses allow the growing of certain vegetables during rainy season, especially tomatoes, which otherwise would suffer from a lot of fungal attacks. In consequence, the quantity of fungicides can be considerably reduced. And these structures are built entirely with locally available materials, shortening the supply chain and significantly reducing the cost to the farmer. One enthusiastic young farmer we interviewed said that he works on a 2.5-acre farm that provides a living wage for him and five other farmers. The new greenhouse was funded by a VSO Tanzania cash project, at a fraction of the price of a conventional greenhouse—costing three million Tsh (roughly $\notin 1.200$) instead of seven million Tsh (approximately $\notin 2.800$). The greenhouse will allow farmers to grow up to three times as many tomatoes than outdoors as well as offering yearround growing cycles. (As this project is fairly new, it is unclear how they judge its marketing potential.) MVIWATA's members are committed to crop diversity, and even though this particular greenhouse is focused on tomatoes, it shares soil with other crops on the premises.

Another technological concern for many farmers in Tanzania is crumbling infrastructure. This was epitomized in the Chauru cooperative in Visezi described in the previous section (see 'Localizes Food Systems'). As recently as 2014, the Tanzanian government halted its provisions of subsidized fertilizer and seeds that Chauru farmers had come to rely on. These fluxes in government support also contribute to unstable market access and maintenance. Cooperative members showed us boarded up chicken coops, rusted out tractors, and leaking irrigation canals that they desperately hoped to revitalize. Chauru members would welcome strategic investment to expand their collective work that is mainly limited to rice production, although they hope to diversify. They pointed out that with new water pumps, they would be able to significantly expand their planting area. Constructing a small dam would allow them to better manage water. And with more extensive revitalization projects, the community would be able to realize their goals of sustainability through agriculture and livestock activities. Yet as investment attention has turned to large-scale economic operations, communities like Visezi continue to be neglected.

One of the most critical resources for food producing communities is access to and management of water. The village of Subira in the Ruvuma administrative region is a success story due to its innovative irrigation scheme. Seven groups in the village of approximately 2,500 are organized by MVIWATA and independently registered as Community Based Organizations in addition to their participation in the national movement. In 2009, the community organized needs assessment gatherings to identify future projects. Recognizing the surrounding valley was previously used for rice production because of its strategic location on the banks of the Ruvuma River, farmers decided to revitalize rice production and install an irrigation scheme. Motivated by the need to diversify crops away from just maize (see 'Food for People'), peasants began to self-organize into committees and sub-committees. It was only after the farmers determined exactly what they wanted their irrigation scheme for intensive rice production to look like that the government came in and offered support. The farmers in the village contribute a portion of their own labor in addition to the work of extension officers and others. More precisely, Subira's community subsidizes twenty percent of the labor, proving that they are more than willing to contribute their share to get things done. During our focus group discussion, the extent of that synchronization was visible, with wheelbarrows moving back and forth as some of the group members continued to work.

Today, the community members of Subira see their project as a social one that benefits the entire village, and the Ministry of Agriculture has singled it out as a pilot project for the Ruvuma region. The state funded Japanese development organization JICA also took notice and offered financial support. Farmers in Subira stressed the connection between and importance of rice production and cooperative involvement (where they market their rice), stating even that cooperatives should be a stipulation for government support in projects like theirs, and were glad that the local government strongly encouraged cooperative participation. Those involved with the Subira irrigation scheme said that what made their project stand out and work was that it came from their own knowledge and organizations— and was implemented from the bottom up.

To conclude, it is indeed these kinds of bottom-up agroecological and grassroots initiatives for which food producers from the farming, fishing, and pastoral communities seek support. This can be realized through varied channels that encourage horizontal learning exchanges and support appropriate technology. In each of these instances, support for saving and lending, and help through extension can make a world of difference to a project's success. The following section will speak more to the intricacies of agroecology and its importance in maintaining healthy local food systems, in part through sustaining rich soil, which is inextricably linked to the building of knowledge and skills.

Investment ideas from the grassroots...

- Support community groups for agricultural production and animal husbandry, including establishment and maintenance of demo plots and attention to collective marketing
- Incorporate local models of savings and lending into food producing projects, with opportunities for greater amounts of credit, and with attention to women
- Invest in education, with emphasis on enhancing local skills in food production for farmers, fishers, and pastoralists
- Partner with learning exchanges between local food providers, especially those in complementary sectors (i.e. farmers and pastoralists)
- Support local and cross-border peasant movements in their education and advocacy activities
- Give value to appropriate small-scale technology, such as greenhouses and drip irrigation.
- Invest in strong community driven partnerships with the government in areas like water management.

VI. Works with Nature

This pillar of food sovereignty refers to farming and harvesting food in ways that work with the cycles of nature and support environmental stewardship and conservation, while rejecting systems and practices that harm ecosystems and pollute. Such dimensions of food sovereignty are particularly important in the face of intensifying global climate change, of which food production is a major contributor, while also among the sectors most adversely impacted. According to GRAIN (2011), approximately half of all human-generated greenhouse gas emissions are connected to the food system, the majority of which are attributed to industrial forms of food production and associated processes-from land clearing, to fertilizer production, to transportation, to the generation of food waste. On the flip side, the food system is on the receiving end of climate-induced disruptions, particularly in the form of unpredictable and extreme weather conditions. Small-scale food providers who rely directly upon the land and water for their livelihoods find themselves disproportionately impacted by such disruptions (ibid). Yet, it is also increasingly recognized that small-scale food providers have a critically important role to play in combatting the climate crisis. This is in regards both to adaptation, such as the ability to adapt both plant and animal breeds and systems of production to harsh conditions, as well as *mitigation*, such as building fertile, carbon-rich soils. It is for these reasons that social movements such as Via Campesina assert that small-scale food providers 'cool the planet' as well as feed much of the world (Tramel 2015).

A key strategy for 'working with nature,' integral to the concept of food sovereignty, is that of *agroecology*. According to leading agroecologists (Altieri and Toledo 2011):

Agroecology is both a science and a set of practices. As a science, agroecology consists of the 'application of ecological science to the study, design and management of sustainable agroecosystems' (Altieri 2002). This implies the diversification of farms in order to promote beneficial biological interactions and synergies among the components of the

agroecosystem so that these may allow for the regeneration of soil fertility, and maintain productivity and crop protection (Altieri 2002).

What the various definitions of agroecology share in common is an emphasis that agroecology is informed and shaped through practice in the field by small-scale food providers with knowledge passed down through generations. Practices of agroecology, which involve farming and other forms of food provisioning in sync with natural cycles, include crop rotation, use of beneficial insects for pest control, recycling of nutrients, building up the organic matter in soil, integrated management of crops and livestock, and support of biodiversity, both terrestrial and aquatic. A key principle is to use what resources are available and to maximize the benefits of natural processes, while keeping external inputs to a minimum—also termed low external input sustainable agriculture (LEISA). While debates continue to rage over the ability of small-scale agroecological systems to meet the food needs of the planet, countless studies have come out affirming that they indeed can, including the landmark International Assessment of Agricultural Knowledge, Science and Technology for Development (IAASTD) of 2009 (McIntyre et al. 2009) conducted by 900 scientists from 110 countries, sponsored by the World Bank and various UN agencies. In fact, studies are not only increasingly affirming that small-scale agroecological systems can be highly productive, but that such systems are actually key to feeding the planet, particularly in the face of climate change and other global challenges (Lin et al. 2011).

As the majority of agricultural investment coming from external sources favors large-scale, industrial systems (De Schutter 2011), the need to support small-scale agroecological systems, given their many documented benefits, is increasingly surfacing in debates over agricultural investment, for instance in the UN Committee on World Food Security (McMichael 2014). Advocates emphasize that investment in agroecology can take many forms, but it is critical that such investment *support* and not undermine local knowledge, as described in the previous section ('Builds Knowledge and Skills'). Recently, in February of 2015, social movements of small-scale food providers from across the world came together with their organizational and academic allies for the International Forum on Agroecology in Nyéléni, Mali, and laid out a series of strategies for supporting agroecology, which are detailed in their final declaration.⁶ This document has the potential to serve as an important reference point in guiding investment in support of agroecology. The declaration also stresses that agroecology is highly context-specific and cannot be applied the same way across the board. Below we explore what some of these strategies look like within particular contexts in Tanzania.

As GRAIN (2011: 4) reminds us, and many others insist too: 'Food begins and ends with the soil.' Indeed, soil is the very basis for the fertility upon which land-based agroecosystems rely. This is a theme that came up in various forms in nearly each of our interviews with those who worked the land, in which a chief concern we heard was having access to sufficient nutrients for good production. For some, this meant concern over waning access to subsidized chemical fertilizers provided by the government, a remnant of the days of nationalization, which have steadily decreased over time. This was the case for the Chauru Cooperative in Visezi, as mentioned in previous sections, which had received subsidized fertilizer until the government stopped supplying it, leaving this as a major need and a major expense for the cooperative members to bear. We also heard from farmers who continued to receive subsidized fertilizers, but not in sufficient amounts to cover all of their operations. Unable to afford fertilizers at unsubsidized rates, their production was negatively impacted. Some expressed feeling caught on a treadmill, in which they had come to rely on these inputs but could not afford them.

Fortunately, there are a number of initiatives underway in Tanzania aimed at reversing these trends. Jordan Gama of the Tanzania Organic Agriculture Movement (TOAM) described how part of the mission of TOAM, which serves as an umbrella group for sustainable agriculture organizations in Tanzania, is to help break these cycles of dependency. A major motivation behind the spread of

⁶ See Declaration of the International Forum for Agroecology, 27 February, 2015:

sustainable agriculture movements in the country, he explained, is to support farmers in transitioning to organic inputs since synthetic chemical inputs were fostering dependency and debt, while also damaging the soil upon which they depended. We heard similar perspectives from staff of the NGO Caritas in both the Songea and Iringa areas, who work closely with smallscale farmers. According to Brito

'By coming together, we are able to share our knowledge. Someone might know how to deal with a particular pest, and someone else might know how to make fertilizer from manure. I've learned that organic fertilizer does a lot better for our crops than industrial fertilizer.'

- Focus group discussion, Ikongosi, Mufindi District

Mgaya of Caritas Songea, ammonium sulfate-based fertilizers, which are particularly ubiquitous in Tanzania, do major damage to Tanzania's tropical soils by raising acidy levels and killing soil microbiota that are critical for fertility. For this reason and also the issue of cost mentioned by Gama, Caritas is supporting farmers in shifting to techniques such as composting, application of manure, and use of leguminous plants that fix nitrogen in the soil naturally.

During our site visits, we met with many farmers in their fields who were already making such a transition. For instance, in Mlete, the site of one of the cassava processing plants that we visited, farmers were opting to grow their cassava free from synthetic chemicals, using animal manure instead. Their challenge was accessing sufficient manure to meet their desired levels of cassava production, and therefore they said that additional livestock were needed. We heard similarly from farmers in the village of Mbinga, whose household and community gardens were thriving from a combination of compost and manure application, and who also said that they could use additional livestock. In Zanzibar, we visited many sites where farmers were using ecological practices incorporating natural forms of soil fertility. In the village of Vilima Viwili, for instance, we met with a woman who is a community outreach and advocacy promoter for MVIWATA Zanzibar. She was very proud of her integrated crop and livestock operation and said that in addition to selling animal products such as goat milk, she was able to sell surplus manure to her neighbors to help them transition away from synthetic chemicals. One of her neighbors whom we met with already had his own agroecology-based integrated crop and livestock system. Unlike his neighbors, he had not started with crops and then incorporated livestock, but instead had started out raising livestock and was inspired to put the manure to good use by growing crops. This was such a success that part of his farm is now home to a farmer field school, where farmers exchange knowledge on topics such as seeds, planting schemes, and natural pest control.

A recurring theme in many of these visits and interviews was the critical role that livestock can play in small-scale sustainable agriculture systems, something which often goes overlooked in discussions of agricultural investment. And even if it is recognized, too little money is made available for what

livestock keepers actually want and need. In larger-scale industrial systems, the tendency is for crops and livestock to be separated into entirely different operations. In the process, animal manure often becomes а problematic waste product, which ends up contaminating ground water and causing other environmental and human health problems, while also contributing

We use organic fertilizer to grow the cassava, which is made from manure mixed with other organic inputs. This reduces expenses from (conventional) inputs. Right now, each of us collects manure from our own place and brings it to our collective plot, but there is not enough manure to sustain production. So there is a need for more livestock.

Focus group discussion, Mlete, Songea Rural District

to climate change (Lin et al. 2011). In smaller-scale agroecological systems, however, livestock can play a critical role in building up the organic matter of soil, which boosts fertility, stores carbon, and helps to retain moisture and prevent erosion, among other benefits (ibid). The pastoralists with whom

we met mentioned similar benefits of pastoral systems, when managed properly over sufficient expanses of land.

Finally, the theme of integrating crops and livestock connects to another recurring theme in our interviews, which is the importance of diversity in general when it comes to food production. Whereas industrial systems tend to emphasize uniformity, for instance through monocropping, or the growing of a single crop over large expanses of land, agroecology strives to mimic nature, and nature is diverse. Agroecological systems therefore reflect such diversity (Lin et al. 2011), for instance through mixed systems of diverse crops, integration of crops and livestock, agroforestry practices, and fisheries management that supports a range of species. This diversity in crops, animals, and farming techniques goes hand in hand with diversity in diets, thus improving nutrition as well (De Schutter 2014). Furthermore, diverse agroecosystems have been shown to be more resilient in the face of increasingly erratic climate conditions, and, if coupled with a move toward more localized food systems (see 'Localizes Food Systems'), hold tremendous potential in reducing the emissions currently fueling climate change and its relationship to both industrial and agroecological production systems, the authors found that:

agro-ecological practices, such as reduced tillage, soil conservation and cover crops, elimination of synthetic pesticides and substituting industrially produced N[itrogen] fixation with biological fixation, can make a large difference in the offsets of GHGs [greenhouse gases], and that creating agricultural systems that more closely resemble the nutrient cycling mechanisms of natural systems may very well help the agricultural system attain net negative or neutral global warming effects.

Despite the many benefits of small-scale, agroecological systems vis-à-vis climate change, the majority of projects currently being supported as 'climate friendly' in Tanzania are large-scale investment projects for industrial tree plantations and for agrofuels. While these are touted as combatting climate change and promoting environmental sustainability, despite there being evidence to the contrary, the many on-the-ground examples that arguably hold the greatest potential in this regard have been largely overlooked. Investment that truly supports sustainability means investment that supports the types of grassroots initiatives we have just outlined above.

Investment ideas from the grassroots...

- Support for farmer field schools for the horizontal exchange of agroecological knowledge
- Provision of technical support for farmer-led agroecology practices by universities and extension services
- Support for integration of small-scale animal husbandry into farming operations, along with support for sustainable pastoralism practices
- Provision of credit to support agroecological practices such as crop diversification and rotation, seed saving, composting, and natural pest control
- Support for community-led conservation efforts in farming, fishing, and pastoral communities

Conclusion

This paper has sought to shed light on what alternative forms of agricultural investment in Tanzania could look like beyond the vision represented by SAGCOT and the G8 New Alliance. To do so, we brought forth the insights of the most advanced experts we could find—some of the many small-scale food providers of Tanzania who have been producing much of the country's food, while supporting their communities, stewarding the environment, and piloting new innovations in the field. What we found, and what we have attempted to provide a sampling of here, was a tremendous repository of knowledge and of solutions at the grassroots level that, with adequate support, hold great potential for the realization of the right to food for all Tanzanians. And yet, this knowledge and these solutions have been largely bypassed in the midst of the many plans underway for the wholesale transformation of Tanzania's agricultural sector. This represents a major missed opportunity toward the progressive realization of the right to food and stands to jeopardize the import gains that have already been made.

In conclusion, there are several key messages coming out of this study that we would like to highlight here. One is that there is no viable one-size-fits-all solution to the agricultural investment needs of Tanzania (or anywhere, for that matter, we would argue). What we found was the importance of *diversity*, from the diversity of Tanzania's food providers, which often goes overlooked, to the importance of crop diversity both for livable incomes and for healthy diets, to the need to maintain diverse agroecosystems that are sufficiently resilient to withstand and mitigate the effects of climate change, starting with diversity of organisms in the soil and in the water. We thus offer the framework of *food sovereignty* as a complementary framework to the right to food for shaping agricultural investment (investment in the broadest sense) that respects, builds upon, and further nurtures such diversity.

Another take-away message is that small amounts of investment, when carried out in such a manner that values food providers and local knowledge, can go a long way. Some of the most promising examples we saw in the field were being carried out primarily through the investment of food providers themselves, often with very modest amounts of external support, and in some cases, with none at all. Here we would like to again reinforce the importance of local food systems when it comes to investment, given their tremendous multiplier potential. We thus echo the point of Olivier de Schutter that, 'The reinvestment in agriculture, triggered by the 2008 food price crisis, is essential to the concrete realization of the right to food. However, in a context of ecological, food and energy crises, the most pressing issue regarding reinvestment is not how much, but *how* (De Schutter 2010:1, emphasis added).

If the reader is left wondering how such localized solutions can be adequately scaled up/outward, we would like to recall attention to the Zanzibar Food Security and Nutrition Act highlighted in the study (see 'Puts Control Locally'). What we witnessed in Zanzibar when we visited communities working to implement this act was an impressive level of organization and coordination, in which communities had developed detailed proposals tailored to their particular contexts through highly participatory processes. The idea is that such proposals are then submitted to the government, which, pending approval, funds the projects so communities can actually implement them. A major problem, however, is that funding is scarce, so there is little to no implementation. That is, everything is in place except the funding to actually put the action plans into action. Although the agricultural policies of Zanzibar are distinct from those of mainland Tanzania, they share similar contexts. It therefore feels important to note that at a time in which Tanzania is attracting significant interest in and resources for agricultural investment, this promising policy and the types of investment is promotes are being entirely overlooked.

In summary, there is no shortage of wisdom and innovation on the part of Tanzania's small-scale food providers, nor is there a lack of a model for how to actually support such efforts through policy. What there seems to be a lack of, by powerful actors both inside and outside of the country, is the political will to actually support these real solutions. Or, as GRAIN (2011: 5) put it, 'There are no technical

hurdles standing in the way-- the knowledge and skills are in the hands of the world's farmers and we can build on that. The only hurdles are political, and this is where we need to focus.'

We hope that the framework and preliminary findings offered in this study can serve as a tool toward both the realization of the right to food through a fresh approach to investment in Tanzania and beyond.

References

- Alden Wily, L. (2012) 'Looking Back to See Forward: The Legal Niceties of Land Theft in Land Rushes', Journal of Peasant Studies 39(3-4): 751-775.
- Altieri, M.A. (2009) 'Agroecology, Small Farms, and Food Sovereignty', Monthly review 61(3): 102-113.
- Altieri, M.A. and V.M. Toledo (2011) 'The Agroecological Revolution in Latin America: Rescuing Nature, Ensuring Food Sovereignty and Empowering Peasants', *Journal of Peasant Studies* 38(3): 587-612.
- Amanor, K.S. (2012) 'Global Resource Grabs, Agribusiness Concentration and the Smallholder: Two West African Case Studies', *Journal of Peasant Studies* 39(3-4): 731-749.
- ASDP (2006) 'Guidelines for District Agricultural Development Planning and Implementation'. Dar es Salaam: Government of Tanzania.
- Benjaminsen, T.A. and I. Bryceson (2012) 'Conservation, green/blue Grabbing and Accumulation by Dispossession in Tanzania', *Journal of Peasant Studies* 39(2): 335-355.
- Bernstein, H. (1981) 'Notes on State and Peasantry: The Tanzanian Case', *Review of African Political Economy* 8(21): 44-62.
- Beuchelt, T.D. and D. Virchow (2012) 'Food Sovereignty Or the Human Right to Adequate Food: Which Concept Serves Better as International Development Policy for Global Hunger and Poverty Reduction?', *Agriculture and Human Values* 29(2): 259-273.
- Bezner-Kerr, R., K.L. McGuire, R. Nigh, D. Rocheleau, J. Soluri and I. Perfecto (2012) 'Effects of Industrial Agriculture on Climate Change and the Mitigation Potential of Small-Scale Agro-Ecological Farms', *Animal Science Reviews 2011*: 69.
- Borras Jr, S.M., J.C. Franco, S. Gómez, C. Kay and M. Spoor (2012) 'Land Grabbing in Latin America and the Caribbean', *Journal of Peasant Studies* 39(3-4): 845-872.
- Borras Jr, S.M., J.C. Franco, S.R. Isakson, L. Levidow and P. Vervest (2015) 'The Rise of Flex Crops and Commodities: Implications for Research', *Journal of Peasant Studies* (ahead-of-print): 1-23.
- Brent, Z., C. Schiavoni and A. Alonso-Fradejas (2014) 'No Time to Lose Common Ground: Why Land Matters in Nutrition Debates', *Development* 57(2): 218-225.
- Bryceson, I. (2002) 'Coastal Aquaculture Developments in Tanzania: Sustainable and Non-Sustainable Experiences'.
- Burnod, P., M. Gingembre and R. Andrianirina Ratsialonana (2013) 'Competition Over Authority and Access: International Land Deals in Madagascar', *Development and change* 44(2): 357-379.
- Claeys, P. (2015) Human Rights and the Food Sovereignty Movement: Reclaiming Control. Routledge.
- Committee on Economic, Social and Cultural Rights (1999) ' 'General Comment 12, the Right to Adequate Food', 12 may 1999', UN Document. New York: United Nations.
- Committee on World Food Security (2011) 'Policy Roundtable: Gender, Food Security, and Nutrition', No. 5. Rome, Italy: FAO.
- Cotula, L. (2012) 'The International Political Economy of the Global Land Rush: A Critical Appraisal of Trends, Scale, Geography and Drivers', *Journal of Peasant Studies* 39(3-4): 649-680.
- CSO Call (Last updated 2015) 'Call of Civil Society Organizations to their Governments on the New Alliance for Food Security and Nutrition in Africa' (a webpage of ActionAid). Accessed 06/07 2015 <<u>http://www.actionaid.org/2015/06/call-civil-society-organizations-their-governments-new-alliance-food-security-and-nutrition-</u>>.
- Curtis, M. (2015) 'New Alliance, New Risk of Land Grabs: Evidence from Malawi, Nigeria, Senegal, and Tanzania'. Johannesburg, South Africa: ActionAid.
- Dakar Declaration (Last updated 2014) 'Dakar Declaration Against Water and Land Grabbing' (a webpage of GRAIN). Accessed 04/03 2015 <<u>http://farmlandgrab.org/24085</u>>.
- De Schutter, O. (Last updated 2015) 'The Right to Food'. Accessed 02/27 2015 < http://www.srfood.org >.
- De Schutter, O. (2014) 'Final Report: The Transformative Potential of the Right to Food Final Report: The Transformative Potential of the Right to Food '. Geneva, Switzerland: United Nations.
- De Schutter, O. (2013) 'Gender Equality and Food Security: Women's Empowerment as a Tool Against Hunger'FAO and Asian Development Bank.
- De Schutter, O. (2012) 'From Charity to Entitlement: Implementing the Right to Food in Southern and Eastern Africa'.

De Schutter, O. (2012) 'Interim Report of the Special Rapporteur on the Right to Food'United Nations.

- De Schutter, O. (2010) 'Report Submitted by the Special Rapporteur on the Right to Food, Olivier De Schutter'. Geneva, Switzerland: Human Rights Council of the United Nations.
- De Schutter, O. 'The Green Rush: The Global Race for Farmland and the Rights of Land Users' (2011)', *Harvard International Law Journal* 52: 504.
- De Schutter, O. and K.Y. Cordes (2011) Accounting for Hunger: The Right to Food in the Era of Globalisation. Bloomsbury Publishing.
- Doss, C. (2011) 'If Women Hold Up Half the Sky, how Much of the World's Food do they Produce?'FAO.
- Edelman, M. (2009) 'Synergies and Tensions between Rural Social Movements and Professional Researchers', *Journal of Peasant Studies* 36(1): 245-265.
- Edelman, M. and S.M. Borras (forthcoming) *Political Dynamics of Transnational Agrarian Movements*. Halifax, Nova Scotia: Fernwood Publishing.
- Edelman, M., C. Oya and S.M. Borras Jr (2013) 'Global Land Grabs: Historical Processes, Theoretical and Methodological Implications and Current Trajectories', *Third World Quarterly* 34(9): 1517-1531.
- FairShare CSA Coalition (2012) 'Ken Meter: 'Local' is Shorthand for a Community-Based Food System' FairShare CSA Coalition. Accessed 05/07/2015 <<u>http://www.csacoalition.org/news/ken-meter-presentation-info/</u>>.
- FAO (Last updated 2015) (a webpage of Food and Agriculture Organization of the United Nations). Accessed 04/10 2015 <<u>http://www.fao.org/pastoralist-knowledge-hub/background/en/</u>>.
- FAO (2001) 'Pastoralism in the New Millennium'.
- Feed the Future (Last updated 2015) 'Southern Agricultural Growth Corridor of Tanzania (SAGCOT)' (a webpage of U.S. Government). Accessed 07/03 2015 <<u>http://feedthefuture.gov/model/southern-agricultural-growth-corridor-tanzania-sagcot</u>>.
- Fontana, M. and L. Natali (2008) 'Gendered Patterns of Time use in Tanzania: Public Investment in Infrastructure can Help', *IFPRI Project on 'Evaluating the Long-Term Impact of Gender-focused Policy Interventions', New York: IFPRI*.
- Food First (2015) 'Issue Primer: Agroecology'. Oakland, California: Food First.
- Francis, J. and I. Bryceson (2000) 'Tanzanian Coastal and Marine Resources: Some Examples Illustrating Questions of'.
- Franco, J., N. Buxton, P. Vervest, T. Feodoroff, C. Pedersen, R. Reuter et al. (2014) 'The Global Ocean Grab: A Primer', *Retrieved from the Economic Justice Program of the Transnational Institute website:* <u>http://www.tni.org/briefing/global-ocean-grab-primer-0</u>.
- Gardner, B. (2012) 'Tourism and the Politics of the Global Land Grab in Tanzania: Markets, Appropriation and Recognition', *Journal of Peasant Studies* 39(2): 377-402.
- Global Convergence (Last updated 2015) 'Global Convergence of Land and Water Struggles' (a webpage of Via Campesina). Accessed 05/05 2015 <<u>http://viacampesina.org/en/index.php/main-issues-mainmenu-27/agrarian-reform-mainmenu-36/1775-declaration-of-the-global-convergence-of-land-and-water-struggles</u>>.
- Goodman, D., E.M. DuPuis and M.K. Goodman (2012) Alternative Food Networks: Knowledge, Practice, and Politics. Routledge.
- Goodman, D., E.M. DuPuis and M.K. Goodman (2012) Alternative Food Networks: Knowledge, Practice, and Politics. Routledge.
- Government of Tanzania (Last updated 2014) 'Investment Opportunity: SEZ/EPZ Program of the Export Processing Zones Authority' (a webpage of Export Processing Zones Authority of the Government of Tanzania). Accessed 07/18 2015 <<u>http://www.epza.go.tz/invest.php?p=232</u>>.
- GRAIN (2014) 'Hungry for Land: Small Farmers Feed the World with Less than a Quarter of all Farmland'. Barcelona, Spain: GRAIN.
- GRAIN (2011) 'Food and Climate Change: The Forgotten Link', Against the grain. Barcelona, Spain: GRAIN.
- Gwalema, S.R. (2013) 'Tourism Development and the Implementation of the National Tourism Policy in Tanzanian Coastal Communities: A Case Study of Ununio, Kaole and Kilwa-Masoko Settlements', in D. Kimaro, A. Munga, A. Mollen, A. Maganya and G. Walalaze (eds) Land Justice for Sustainable Peace in Tanzania, pp. 233. Tanga, Tanzania: Sebastian Kolowa Memorial University ICT Department.

- Hall, R., M. Edelman, S.M. Borras Jr, I. Scoones, B. White and W. Wolford (2015) 'Resistance, Acquiescence Or Incorporation? an Introduction to Land Grabbing and Political Reactions 'from Below'', *Journal of Peasant Studies* 42(3-4): 467-488.
- Halweil, B. (2004) Eat here: Reclaiming Homegrown Pleasures in a Global Supermarket. WW Norton & Company.
- Harvey, D. (2003) The New Imperialism. Oxford University Press.
- HLPE (2014) 'Sustainable Fisheries and Aquaculture for Food Security and Nutrition', No. 7. Rome, Italy: CFS.
- HLPE (2011) 'Land Tenure and International Investments in Agriculture'. Rome, Italy: CFS.
- International Fund for Agricultural Development (2014) 'Investing in Rural People in the United Republic of Tanzania: Rural Poverty in the United Republic of Tanzania'. Rome, Italy: International Fund for Agricultural Development.
- IWGIA (2012) 'Country Technical Note on Indigenous Peoples' Issues: The United Republic of Tanzania'IFAD and IWGIA.
- Jacquet, J., H. Fox, H. Motta, A. Ngusaru and D. Zeller (2010) 'Few Data but Many Fish: Marine Small-Scale Fisheries Catches for Mozambique and Tanzania', *African Journal of Marine Science* 32(2): 197-206.
- Kay, S. (2014) 'Reclaiming Agricultural Investment: Towards Public-Peasant Investment Synergies', TNI Agrarian Justice Programme Policy Paper.Amsterdam: Transnational Institute.Available from: <u>http://www.tni.org/sites/www.tni.org/files/download/reclaiming_agricultural_investment.pdf</u> (accessed October 12, 2014).
- Kilima, F., C. Chung, P. Kenkel and E.R. Mbiha (2008) 'Impacts of Market Reform on Spatial Volatility of Maize Prices in Tanzania', *Journal of Agricultural Economics* 59(2): 257-270.
- Lin, B.B., M.J. Chappell, J. Vandermeer, G. Smith, E. Quintero, R. Bezner-Kerr et al. (2012) 'Effects of Industrial Agriculture on Climate Change and the Mitigation Potential of Small-Scale Agro-Ecological Farms', *Animal Science Reviews 2011*: 69.
- Maro, F. and F. Mwaijande 'Food Price Transmission Analysis: Evidence for Strengthening Food Security Policy Measures in Tanzania'. Dar es Salaam, Tanzania: Economic and Social Research Foundation.
- Martinez-Torres, M.E. and P.M. Rosset (2010) 'La Vía Campesina: The Birth and Evolution of a Transnational Social Movement', *The Journal of Peasant Studies* 37(1): 149-175.
- McIntyre, B.D., H.R. Herren, J. Wakhungu and R.T. Watson (2009) 'Agriculture at a Crossroads: Synthesis Report. International Assessment of Agricultural Knowledge', *Science and Technology for Development, Island Press*.
- McKeon, N. (2014) 'The New Alliance for Food Security and Nutrition A Coup for Corpate Capital'.
- McMichael, P. (Last updated 2014) 'The CSM and the Rai'. Accessed 03/03 2015 <<u>http://www.csm4cfs.org/files/News/163/the csm rai.pdf</u>>.
- McMichael, P. (2012) 'The Land Grab and Corporate Food Regime Restructuring', *Journal of Peasant Studies* 39(3-4): 681-701.
- McMichael, P. (2009) 'A Food Regime Analysis of the 'world Food Crisis'', *Agriculture and human values* 26(4): 281-295.
- Minot, N. (2010) 'Staple Food Prices in Tanzania'. Washington DC: International Food Policy Research Institute.
- Mkama, W., A. Mposo, M. Mselemu, J. Tobey, P. Kajubili, D. Robadue and J. Daffa (2010) ' Fisheries Value Chain Analysis, Bagamoyo District, Tanzania '. Narragansett, Rhode Island: Coastal Resources Center, University of Rhode Island.
- Mollen, A. and E. Porokwa (2013) 'Pastoralists Land Rights and Space: A Challenged Livelihood in Tanzania', in D. Kimaro, A. Munga, A. Mollen, A. Maganya and G. Walalaze (eds) Land Justice for Sustainable Peace in Tanzania, pp. 100. Tanga, Tanzania: Sebastian Kolowa Memorial University ICT Department.
- MVIWATA (Last updated 2015) 'Mviwata'. Accessed 06/01 2015 <<u>http://www.mviwata.org</u>>.
- New Alliance (Last updated 2015) 'New Alliance for Food Security and Nutrition: Partner Countries'. Accessed 05/27 2015 <<u>https://new-alliance.org/countries</u>>.
- Nyéléni (Last updated 2007) 'Declaration of the Forum for Food Sovereignty, Nyéléni 2007'. Accessed 04/03 2015 <<u>http://www.nyeleni.org/spip.php?article290</u>>.
- Nyéléni (2007) 'Nyéléni Synthesis Report'. Sélingué, Mali: .

Odgaard, R. (2006) Land Rights and Land Conflicts in Africa: The Tanzania Case: Country Policy Study. DIIS. Paget-Clarke, N. (2010) And the Echo Follows. Author House.

- Patel, R., R. Bezner Kerr, L. Shumba and L. Dakishoni (2015) 'Cook, Eat, Man, Woman: Understanding the New Alliance for Food Security and Nutrition, Nutritionism and its Alternatives from Malawi', *Journal of Peasant Studies* 42(1): 21-44.
- Paul, H. and R. Steinbrecher (2013) 'African Agricultural Growth Corridors and the New Alliance for Food Security and Nutrition', *Who benefits, who loses*.
- Peters, P.E. (2004) 'Inequality and Social Conflict Over Land in Africa', *Journal of Agrarian Change* 4(3): 269-314.
- Porter, M., R. Mwaipopo, R. Faustine and M. Mzuma (2008) 'Globalization and Women in Coastal Communities in Tanzania', *Development* 51(2): 193-198.
- Porter, M., R. Mwaipopo, R. Faustine and M. Mzuma (2008) 'Globalization and Women in Coastal Communities in Tanzania', *Development* 51(2): 193-198.
- Posey, D.A. and G. Dutfield (1996) Beyond Intellectual Property: Toward Traditional Resource Rights for Indigenous Peoples and Local Communities. IDRC.
- Robbins, M.J. (2015) 'Exploring the 'localisation' dimension of Food Sovereignty', *Third World Quarterly* 36(3): 449-468.
- Rweyemamu, J. (1973) 'Underdevelopment and Industrialization in Tanzania'.
- SAGCOT (Last updated 2015) 'SAGCOT (Southern Agricultural Growth Corridor of Tanzania)'. Accessed 05/27 2015 <<u>http://www.sagcot.com</u>>.
- Schiavoni, C. (2009) 'The Global Struggle for Food Sovereignty: From Nyéléni to New York.', *Journal of Peasant Studies* 36(3): 682-689.
- Schroeder, R.A. (1999) 'Geographies of Environmental Intervention in Africa', *Progress in Human Geography* 23(3): 359-378.
- Kelvin Mashisia Shikuku, Mwongera, Caroline, Okolo, Wendy, Winowiecki, Leigh, Twyman, Jennifer and Laderach, Peter (2015) 'Simple Yet Comprehensive: A Climate Smart Agriculture Rapid Appraisal Prioritization Tool for Outscaling CSA Practices' The Climate Change, Agriculture, and Food Security Research Program of the Consultative Group for International Agricultural Research https://ccafs.cgiar.org/blog/simple-yet-comprehensive-climate-smart-agriculture-rapid-appraisal-prioritization-tool#.VfQxM3iEfll>.
- SOFA Team and C. Doss (2011) 'The Role of Women in Agriculture'FAO.
- Tanzanian Markets-PAN (2013) 'Post-Harvest Losses in Tanzania: Challenges and Options for Mitigation', Policies that work 4 markets. Dar es Salaam, Tanzania: .
- Tanzanian Markets-PAN 'Impact of Tariff and Non-Tariff Trade Barriers for Staple Foods on the Livelihood of Small Scale Farmers', Policies that work 4 markets. Dar es Salaam, Tanzania: .
- Tobisson, E., J. Andersson, Z. Ngazi, L. Rydberg and U. Cederlof (1998) 'Tides, Monsoons and Seabed: Local Knowledge and Practice in Chwaka Bay, Zanzibar', *Ambio* 27(8): 677-685.
- Tramel, S. (2015) 'The Heat is on: Via Campesina and Allies Challenge Climate Capitalism' Huffington Post,.
- Tramel, S. (2014) 'Mozambican Peasants Vs. the Great African Land Grab' Huffington Post,.
- Twomey, H., C.M. Schiavoni and B. Mongula 'A Right to Food Perspective'.
- United Republic of Tanzania Prime Minister's Office (2013) 'SAGCOT Resettlement Policy Framework'. Dar es Salaam, Tanzania: United Republic of Tanzania Prime Minister's Office.
- USAID (2013) 'More than \$3 Billion in Private Sector Investment for the New Alliance for Food Security and Nutrition' USAID: News and Information. Accessed 05/27 <<u>https://www.usaid.gov/news-information/fact-sheets/more-3-billion-private-sector-investment-new-alliance-food-security-and</u>>.
- Van der Ploeg, Jan Douwe (2009) The New Peasantries: Struggles for Autonomy and Sustainability in an Era of Empire and Globalization. Routledge.
- Via Campesina (Last updated 2015) 'Declaration of the International Forum for Agroecology'. Accessed 04/03 2015 <<u>http://viacampesina.org/en/index.php/main-issues-mainmenu-27/sustainable-peasants-agriculture-mainmenu-42/1749-declaration-of-the-international-forum-for-agroecology</u>>.
- Via Campesina (Last updated 2015) 'Our Members'. Accessed 06/01 2015 <<u>http://viacampesina.org/en/index.php/organisation-mainmenu-44/our-members-mainmenu-71</u>>.
- Via Campesina (Last updated 2013) 'Tanzania: New Study shows that Large Scale Investment Likely to Disadvantage Smallholder Farmers'. Accessed 06/01 2015 <<u>http://viacampesina.org/en/index.php/main-issues-mainmenu-27/agrarian-reform-mainmenu-36/1484-tanzania-new-study-shows-that-large-scale-investment-likely-to-disadavantage-smallholder-farmers>.</u>

- Via Campesina (Last updated 2011) 'Stop Land Grabbing Now!'. Accessed 04/03 2015 <<u>http://viacampesina.org/en/index.php/main-issues-mainmenu-27/agrarian-reform-mainmenu-36/1127-stop-land-grabbing-now</u>>.
- Via Campesina and GRAIN (2015) 'Seed Laws that Criminalise Farmers: Resistance and Fightback'. Barcelona, Spain: GRAIN.

Vice President's Office (2003) 'National Integrated Coastal Environment Management Strategy'.

- White, B., S.M. Borras Jr, R. Hall, I. Scoones and W. Wolford (2012) 'The New Enclosures: Critical Perspectives on Corporate Land Deals', *Journal of Peasant Studies* 39(3-4): 619-647.
- Windfuhr, M. and J. Jonsén (2010) Food Sovereignty: Towards Democracy in Localized Food Systems-Responding to a Changing Environment. Practical Action Publishing.
- Wolford, W., S.M. Borras, R. Hall, I. Scoones and B. White (2013) 'Governing Global Land Deals: The Role of the State in the Rush for Land', *Development and change* 44(2): 189-210.
- World Economic Forum (2013) 'Achieving the New Vision for Agriculture: New Models for Action'. Geneva, Switzerland: .
- World Food Programme (Last updated 2015) 'Tanzania, United Republic of (a webpage of World Food Programme). Accessed 05/05 2015 <<u>http://www.wfp.org/countries/tanzania-united-republic-of/overview</u>>.
- Wuyts, M. and B. Kilama (2015) 'Planning for Agricultural Change and Economic Transformation in Tanzania?', *Journal of Agrarian Change*.
- Yara (2015) 'Pushing Climate Smart Agriculture' Yara: Knowledge grows. Accessed 28 May 2015 <<u>http://yara.com/media/news_archive/pushing_climate_smart_agriculture.aspx</u>>.