



# **Food and Finance**

## ***Toward Life-Enhancing Agriculture***

***Edited by Athena Peralta***

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**World Council  
of Churches**  
Publications

FOOD AND FINANCE  
Edited by Athena Peralta

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## Foreword

Recent decades have been marked by unprecedented financialization – or the growing importance of financial markets, motives, institutions, and elites in the operation of the national and global economy. In agriculture, financiers and speculators are turning to food crops and monocultural farming estates as lucrative areas for profit-making. This ongoing phenomenon has resulted in unstable food prices as well as large-scale land acquisitions with profound social and ecological costs: hunger, displacement, and the poisoning of soils and waters.

The phenomenon of financialization of food raises many questions: Globally, who are the key agricultural financiers or investors? What types of agricultural models are they financing and therefore promoting? What are the consequences of their activities for food access by the global poor, for the livelihoods of peasants worldwide, and for our increasingly fragile eco-systems? Are there other agricultural investment models that are not beholden to the profit logic, that foster just economic relationships and that encourage ecological renewal? Finally, how do we, as churches and faith-based organizations, respond through critical theological reflection, advocacy for policy changes and institutional transformation, and financing practical alternatives within our communities?

Responding to these challenges, the World Council of Churches (WCC) and Bread for all (Bfa) initiated a project aptly titled “From the Financialization of Food to Life-enhancing Agriculture” with the following aims: to better understand the connections between food and finance; to explore agricultural production and investment models that are not beholden to the profit logic, that foster just economic relationships and that encourage ecological renewal; and to map out ways in which churches and church-related organizations can respond through critical theological reflection, advocacy for policy changes and institutional transformation, and investing in alternatives within their communities.

As part of project, the WCC and Bfa commissioned the two studies contained in this volume to shed light on the role, channels of influence, and impacts of financial institutions and players – especially philanthropic foundations and international development banks – in agricultural production and distribution. These actors shape and affect the global food regime not only through hedging and speculation, but also through their traditional role of providing credit, and through direct or third-party large-scale investments in farming and farmlands.

In this discussion it is essential to recall that by far the biggest investors in agriculture worldwide are the (small scale) farmers themselves, not banks and other financial actors as is often assumed. Farmers invest through their personal savings and labor to improve and enlarge the resource base, e.g. soil quality, irrigation systems and capacities. Therefore issues beyond finance have to be considered when talking about investment in life-enhancing agriculture. Policy and public goods such as health, education services and infrastructure are necessary for enabling smallholder farmers’ investments and strengthening rural livelihoods. Equally important is the recognition of individual and collective rights to land, water and biodiversity including seeds to allow farmers’ investments to be sustainable.

Against this background, the WCC under the frame of its work on economy of life and care for creation is advocating for a financial architecture that invests in the social and ecological good, in life-giving agriculture that not only provides nutritious food and decent livelihoods, but also promotes just relationships between farmers, consumers, traders and investors as well as nourishes our ecosystems. Through the WCC-Ecumenical Advocacy Alliance campaign on food for life, it seeks

to uphold the rights of the small food producers who represent ninety percent of all farms worldwide and who produce seventy percent of the world's food.

Bfa is engaged in supporting the struggle of farmers and indigenous communities to maintain or regain control over their land and seeds in order to produce food and sustain their livelihoods. As a campaigning organization in Switzerland, Bfa sheds light on the role of Swiss financial and economic actors involved in unsustainable agricultural projects that lead to land grabbing, deforestation, environmental degradation and human rights violations. Bfa considers itself as part of a movement striving for a transformation in society based on true respect of nature and all human beings. A move towards democratically controlled agro-ecological food systems is at the heart of this transformation.

Fortunately, a paradigm shift towards life-giving agriculture is slowly emerging across both developed and developing countries, led by social movements at the forefront of initiatives such as community-supported ecological farming, pesticide-free towns and cities, local communities addressing resource limits (transition networks), local food networks, and 'de-growth'.

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# Introduction

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## *The Financialization of Food*

Sweeping processes of globalization have drastically changed the agricultural landscape in recent decades. An important feature of this ongoing transformation is the increasing penetration of financial motives, markets, institutions, and elites in the workings and operation of the global food system – a phenomenon that may be described as the “financialization” of food (Epstein 2005).

Various financial actors are now turning to food crops and monocultural agricultural estates, which were previously sidelined and seen as high risk, as lucrative areas for profit making. Their maneuvers include creating and trading new financial products that convert food into commodities and highly complex derivatives, providing huge agricultural credits and, in some cases, directly managing industrial farms. In other words, agriculture is now regarded as an asset class (Chen et al. 2013, in Mentz-Lagrange). In the process, the free trade rhetoric that dominated the development discourse towards the end of the 20th century “has given way to an ‘investment-led assault,’ in which circulation of food is compounded by global financial flows into enclosing land for industrial agriculture and/or speculation” (Brooks 2016). “[G]iven the rising emphasis on competitiveness and profitability and the related abstraction of the financial product from its physical form,” Mentz-Lagrange in this report concludes in this report that “food is de facto becoming financialized.”

The growing literature on the financialization of food has linked this phenomenon to volatility in food prices and to large-scale land acquisitions that are challenging smallholders’ land rights all over the global South. These, in turn, have generated profound social and ecological costs. The 2008 global food crisis – now widely acknowledged to have been triggered at least in part by excessive speculation in agricultural commodity futures markets<sup>1</sup> – continues to be illustrative. The crisis pushed into hunger and poverty 130 million to 155 million people in 2008 alone, following an increase in global food prices of over 80 percent from the previous three years (World Bank 2010). Furthermore, so-called land grabs by big agricultural investors in soya, palm, pineapples, and other cash crops have displaced entire villages in rural Africa, Asia, and Latin America from their sources of sustenance and livelihoods (ActionAid 2014).

## *Responsible agricultural investment?*

In response to mounting concerns over these trends, the Food and Agriculture Organization (FAO), the World Bank, and other global institutions approved a set of Principles for Responsible Investments in Agriculture and Food Systems in 2014 (FAO 2014). Rosario Guzman and Arnold Padilla in this report point out that these principles – while promoted as simultaneously spurring rural development and addressing threats associated with large-scale agricultural investments – and other efforts to regulate investment “are voluntary ... often in the context of corporate social responsibility (CSR) publicity, even as corporations push for legally binding instruments to protect their investments such as through a new generation of trade and investment agreements like the Trans-Pacific Partnership (TPP) deal.”

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<sup>1</sup> See, for instance, Luciano Gutierrez (2012).

### *Key actors in the financialization of food*

The bulk of the literature on the connections between food and finance tends to put a spotlight on large, private institutional investors – commercial banks, insurance companies, pension funds, etc. – and the speculative nature of their investments. While the actions of these virtual investors (as per the classification proposed by Murphy et al. 2012, in Mentz-Lagrange) bear significant socio-economic impacts, other players driving the financialization of food deserve attention.

Addressing a gap in available research, this report presents two studies that examine relatively obscure or less-observed financial players that are shaping and influencing the global food regime. The first study, authored by Sasha Mentz-Lagrange, explores the role of charitable foundations and global agricultural initiatives in the financialization of food in East Africa, taking a special interest in Mozambique. The second study, conducted by Rosario Guzman and Arnold Padilla, investigates the role of international development finance institutions, namely the World Bank and the Asian Development Bank (ADB), in driving processes of financialization in the Asian region, with a focus on the Philippines.

### *The role of charitable foundations and international initiatives*

Charitable foundations, by their nature of being non-profit oriented, are not usually associated with current trends of financialization. However, some of them vigorously support initiatives that aim to accelerate agribusiness investments as a route to alleviating poverty. Mentz-Lagrange in this report finds that the most important and influential foundation present in East Africa's agricultural sector is the Bill & Melinda Gates Foundation (BMGF). BMGF is a major donor to agricultural research and development and has a tremendous influence in shaping the region's agricultural sector, primarily by financing the Alliance for a Green Revolution in Africa (AGRA). Over an eight-year period, AGRA released 501 new seed varieties and 1,339,030 MT of inorganic fertilizer in 14 countries in the region, thereby significantly expanding private markets for seeds and fertilizers.

Aside from AGRA, Africa is the target of several international agricultural initiatives fuelled by financial injections from rich industrialized countries. These include the New Alliance for Food Security and Nutrition (G8NAFSN), Grow Africa, and the African Fertilizer and Agribusiness Partnership (AFAP). Mentz-Lagrange points out that the aforementioned initiatives intrinsically form part of the phenomenon of financialization inasmuch as their push for greater involvement of private entities in Africa's agro-food chain allows for the financial motives of these entities to play a greater role in food systems. She further argues that the phenomenon under consideration is the corporatization of the agricultural sector, facilitated by liberalization and the rising interests of numerous financial institutions and elites.

### *The role of international development banks*

International financial institutions, namely the World Bank and the ADB, are also actively fostering new and greater investments – especially private-sector infusions – in agriculture in the name of rural development. Moreover, in the context of the Sustainable Development Goals or the post-2015 development framework, their proposals for an expanded role for private finance in agriculture are increasingly being framed in terms of a “broad transformative agenda” (Brooks 2016).

Guzman and Padilla in this report express concern over the World Bank's Enabling the Business of Agriculture programme, which pressures developing countries to implement reforms to ease business operations and attract private finance in agriculture. The authors observe a surge in total



agriculture and forestry-related investments made by the World Bank's private sector arm, the International Finance Corporation, which rose by 169 percent from US\$512 million in 2011 to US\$1.375 billion in 2015. Likewise, the ADB (2008) plans to increase funding to its Private Sector Operations Department, from 12 percent in 2007 to 50 percent in 2020, as per its ADB Strategy 2020. These developments are not only reflective of how development banks are helping to smooth private-sector investments in agriculture through providing soft loans, guarantees, political risk insurance, and the like. These may also be seen as "investments in the future financialization of the economy" in that "[t]hey aim at deepening financial markets in developing countries (or even building them, where they do not currently exist) by making small farmers...more dependent on debt and retail financial markets" (Tricarico 2012). Examples include "encouraging farmers to cope with food price volatility by financially hedging their risks, or by buying food commodity futures, weather derivatives and the like" (Tricarico 2012).

### *Public-private partnerships in agriculture*

Guzman and Padilla in this report find that various World Bank and ADB loans, grants, and projects have supported tie-ups between public and private equity – in other words, public-private partnerships (PPPs) – in Philippine agriculture. One example is the World Bank's Mindanao Rural Development Project in the Philippines, which imposes fees on farmers' use of irrigation facilities, a crucial agricultural service. Meanwhile, the G8NAFSN, Grow Africa, and the AFAP are effectively PPPs focused on the African region.

PPPs "conveniently embed private agricultural investment in the framework of 'development' and facilitate the more systematic flows of public resources to private profits" (Guzman & Padilla). Using public resources, PPPs enable private investments to capture supply chains. They promote market-based approaches that are reshaping the agricultural value chains in the target countries through "innovative" technology transfers as well as policy changes in seed laws, pesticide regulations, and so on that make target countries more permeable to transnational corporate interests (Mentz-Lagrange). These PPPs are inherently driven by financialization, as the majority of small-scale farmers, whether in Africa or Asia, require some form of credit to purchase expensive inputs, such as certified seeds and fertilizers (Mentz-Lagrange).

### *Climate-smart agriculture*

The immense challenges posed by climate change and its adverse impacts on farming provide yet another vehicle for greater private-sector involvement in – and further financialization of – agriculture. In its *Agriculture Action Plan (AAP) 2013–2015*, the World Bank (2013, in Guzman & Padilla), together with a broad global alliance that now includes governments and corporations, calls for investments in climate-smart agriculture to meet the goals of increasing agricultural productivity, building climate resiliency, and reducing greenhouse gas emissions. Tellingly, however, the AAP discusses climate-smart agriculture in relation to the need for "genetically engineered, hybrid, high-input seeds" to produce commodities for export (Holt-Gimenez et al. 2015, in Guzman & Padilla).

Moreover, the World Bank is promoting crop-related insurance offerings, such as the Global Index Insurance Facility. While the provision of financial safety nets to small-scale farmers who are encountering growing climate-related risks is certainly warranted, "index-based insurance actually pushes farmers away from the diversified farming practices that build climate resilience" by fostering risky behaviour and building dependency on certain seed varieties and pesticides (Holt-Gimenez et al. 2015, in Guzman and Padilla).

Overall, the charitable foundations, global agricultural initiatives, and international development banks under review are pushing and expanding a similar narrative: that it is impossible to tackle climate change, end hunger, reduce rural poverty, and achieve rural progress without private finance taking the lead and “with the state and other public institutions ... play[ing] a ‘catalytic’ role in attracting the resources of the private sector” (Brooks 2016).

### *Social and ecological consequences*

The studies in this report briefly investigate how the financialization of food as driven by the aforementioned actors affects local and regional agricultural systems, food security, smallholder farmers’ livelihoods, social welfare, and ecological sustainability. The examination of these trends is grounded in the country cases of Mozambique and the Philippines.

In both countries, the purported benefits accruing to small-scale farmers have come under critical scrutiny as the agricultural programmes supported by some charitable foundations and international financial institutions have reportedly contributed to the relocation of farmers to semi-arid or less-fertile lands and to precarious employment for farmers as plantation workers and contractors. In the case of the World Bank’s Mindanao Rural Development Project in the Philippines, some farmer beneficiaries have become mired in irrigation debt. While these programmes are promoted in the name of smallholder farmers, “researchers ... have sounded the alarm that the main beneficiaries of such initiatives are likely to be the agri-business corporations themselves, as the actors best placed to position themselves strategically in value chains to achieve their business goals...undermining [the] ecological and socio-institutional foundation of smallholder farming and livelihood systems” (Brooks 2016).

Mentz-Lagrange in this report cites the manifold ecological consequences of agro-industrial models financed by the aforementioned actors, which include “fertilizer poisoning” of soils, groundwater depletion, salinization, and water nitrification. Fuelled by high levels of synthetic inputs and machinery, such models also contribute significantly to global warming (IPCCC 2013, in Mentz-Lagrange). In the medium and long term, these ecological issues negatively affect agricultural production and food security.

Thus, “[m]easured against the requirement that they should contribute to the realisation of the right to food, the food systems we have inherited from the twentieth century have failed” (De Schutter 2014, in Mentz-Lagrange).

### *Towards life-enhancing agriculture*

That there is a dire need for investment in Africa’s and Asia’s agricultural sectors brooks no argument. Rural investments are strongly linked to poverty reduction, yet, in the case of the Philippines, government spending in agriculture relative to total spending has been steadily shrinking from an already meagre 6.3 percent in 1980 to 5 percent in 2014 (Guzman & Padilla). Rather, the central questions we must grapple with are these: What kinds or forms of investments contribute to enriching rural livelihoods and enabling food security and sovereignty instead of exacerbating inequalities and eroding the right to food? And, more fundamentally, what vision of agriculture should we be investing in?

Expressing concern over recent trends of financialization which disproportionately affect impoverished rural communities, the World Council of Churches (WCC) and Bread for all commissioned the two studies on the role of charitable foundations and development banks in the

financialization of food. This was done as part of a project aptly titled “From the Financialization of Food to Life-enhancing Agriculture.” The project has the following aims:

- first, to better understand the connections between food and finance;
- second, to explore agricultural production and investment models that are not beholden to the profit logic, that foster just economic relationships, and that encourage ecological renewal; and
- third, to map out ways in which churches and church-related organizations can respond through critical theological reflection, advocacy for policy changes and institutional transformation, and investing in alternatives within their communities.

Ultimately, the project aims to build a network of churches, church-linked agencies, civil society partners, and rural communities that will jointly examine and address the intersections between food and finance based on the recognition that sowing the seeds of life-enhancing agriculture entails enabling investments in food and agricultural systems that nurture healthy communities and ecosystems. Therefore, at the heart of this interrogation is the imperative to identify levers of action to direct agriculture onto a path that is life-enhancing.

Life-enhancing agriculture is a concept that has emerged from faith-based and rural communities that have been deeply reflecting on the question of which food systems best support life. It is a fluid and evolving concept. It is meant to complement, not replace or compete with more established and politically transformative concepts such as food sovereignty – which puts forward people’s self-determination in defining their own food and agriculture systems – and the right to food, defined as “the right of every individual, alone or in community with others, to have physical and economic access at all times to sufficient, adequate and culturally acceptable food, that is produced and consumed sustainably, preserving access to food for future generations” (De Schutter 2014).

Presently, the abstraction of food and land from their physical forms into financial products and instruments for profit making not only muddles our understanding of who bears responsibility for price volatility and land grabs, but also inhibits us from regarding food and land with reverence and respect as life-giving and life-sustaining elements to which all humans should have a right (De Schutter 2014). Life-enhancing agriculture is therefore a response to the need to reclaim the ethical, theological, and spiritual dimensions of food and land in an era marked by financialization and underpinned by a culture of greed that is spreading the damaging myth that more consumption, more profit, and more growth are always and unfailingly good.

In 2005, in Wonju, Korea, the WCC, together with other ecumenical organizations, convened the Life-giving Agriculture Forum. The report from the gathering declares:

We affirm that the Earth is not our property, but created by God as home and garden for all creatures. Hence, all must have their legitimate place and share in the resources of the world. Life-giving agriculture means that what we produce excludes no one. None goes hungry while others consume excessively.

Human creatures should not assume the role of the Creator, but must respect and care for the creation that God has made. We cannot worship God the Creator if we despise, destroy or pollute the creation that God has made. We cannot claim to respect all creatures if we allow the patriarchal domination of women and nature to continue. This must change if we want to integrate ourselves into the web of life.

We cannot keep breaking the strands in this interconnected web by cultivating only what brings profit to us and pushing other species to extinction. We must contribute to the

preservation of biodiversity, because each species has a role in sustaining and promoting the health of the organic whole (Oikotree 2016).

Life-enhancing agriculture is an essential pillar in building the ecumenical vision of an Economy of Life, inasmuch as without agriculture, without food, human society cannot survive. The following are some important hallmarks of life-enhancing agriculture:

- It puts farmers – or those who till the land and produce the food, their needs, and their livelihoods at the centre.
- It ensures that all peoples, regardless of class, gender/sexuality, race/ethnicity, and religion, eat sufficiently and adequately in order to live lives that are physically, mentally, and spiritually fulfilling, thus realizing the human right to food.
- It produces a diversity of healthy and nutritious food, medicines, and other products for the sustenance of human communities in accordance with their cultures and norms.
- It takes a holistic perspective that sees producers and consumers as part of one household.
- It promotes just and equitable economic relationships between and among producers, investors, traders, and consumers.
- It promotes democratic policy making in food systems and draws wisdom and learnings from indigenous peoples and farming communities that have traditionally lived in close relation with the land.
- It nourishes and regenerates soil, water, air, and entire ecosystems upon which the production of food fully depends, recognizing that these are the bases of sustenance not only for current generations, but also for future generations of living beings, human and non-human.
- It comprehends that land, water, and air are essentially commons – gifts for the provisioning of all life – and ought not to be privatized or commoditized for profit.
- It is founded on the profound understanding that all beings are interrelated in the web of life.

There are numerous examples all over the world of how we may live out and practise life-enhancing agriculture, some of which are highlighted in the studies contained in this report. One of the biggest challenges is how to incubate and scale up these virtuous models and therefore how to challenge destructive trends of the financialization of food and invest in life-enhancing agriculture in our communities and beyond.

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## Abbreviations

|         |   |
|---------|---|
| AAAF    | Actis Africa Agribusiness Fund  |
| AAC     | African Agricultural Capital Ltd.   |
| AACF    | African Agricultural Capital Fund   |
| ABCD    | Archer Daniels Midland, Bunge, Cargill, Dreyfus                                     |
| ACA     | African Century Agriculture Group   |
| ACB     | African Centre for Biodiversity   |
| ADB     | Asian Development Bank  |
| AFAP    | African Fertilizer Agribusiness Partnership   |
| AfDB    | African Development Bank AGRA   |
| AFMA    | Agriculture and Fisheries Modernization Act   |
| AFSA    | Alliance for food sovereignty in Africa   |
| AGRA    | Alliance for a Green Revolution in Africa   |
| AIF     | Agricultural Investment Fund  |
| ANR     | Agriculture and Natural Resources   |
| APC     | Agribusiness Partnership Contract   |
| APIF    | Agribusiness Partners International Fund  |
| APL     | Adaptable Program Loan  |
| ARC     | Agrarian Reform Communities   |
| ARIPO   | African Regional Intellectual Property Organisation                                 |
| ASIF    | Africa Seed Investment Fund   |
| AUC     | African Union Commission  |
| AusAID  | Australian Agency for International Development                                     |
| BMGF    | Bill & Melinda Gates Foundation   |
| BMZ     | German Federal Ministry for Economic Cooperation and Development                    |
| CAADP   | Comprehensive Africa Agriculture Development Programme                              |
| CDC     | Commonwealth Development Corporation  |
| CDE     | Centre for Development and Environment  |
| CFAD    | Community Fund for Agricultural Development   |
| CFS     | Committee on World Food Security (UN)   |
| CFS RAI | Principles for Responsible Investments in Agriculture and Food Systems              |
| CGIAR   | Consortium of International Agricultural Research <i>Centers</i>                    |
| CIGA    | German Institute of Global and Area Studies   |
| CIRAD   | Centre de coopération Internationale en Recherche Agronomique pour le Développement |
| COMESA  | Common Market of Eastern and Southern Africa  |
| CPPIB   | Canadian Pension Plan Investment Board  |
| CPS     | Country Partnership Strategy  |
| CSA     | Community supported agriculture   |
| CSR     | Corporate Social Responsibility   |
| DA      | Department of Agriculture   |
| DEE     | Developing and Emerging Economies   |
| DFI     | Development Finance Institution   |
| DfID    | Department of International Development, UK   |
| EADB    | East African Development Bank   |
| EBA     | Enabling the Business of Agriculture  |
| EMPEA   | Emerging Market Private Equity Association  |
| ESG     | Environmental, social and governance issues   |
| FABs    | UN Global Compact Food & Agriculture Business Principles                            |
| FAO     | Food and Agriculture Organization (UN)  |



|         |  |
|---------|--|
| FDI     | Foreign direct investment  |
| FIAN    | Food First Information and Action Network                                    |
| FIAS    | Foreign Investment Advisory Service  |
| FPIC    | Free, prior and informed consent   |
| G20     | Group of 20  |
| G8NAFSN | G8's "New Alliance for Food Security and Nutrition                           |
| GACSA   | Global Alliance for Climate Smart Agriculture                                |
| GDP     | Gross domestic product   |
| GEF     | Global Environment Facility  |
| GFRP    | Global Food Crisis Response Program  |
| GINN    | Global Impact investing network  |
| GIZ     | German Agency for International Cooperation                                  |
| GM      | Genetically Modified   |
| GSFF    | Global Solidarity Forest Fund  |
| HAGL    | Hoang Anh Gia Lai  |
| IAASTD  | Assessment of Agricultural Knowledge, Science and Technology for Development |
| IATP    | Institute for Agriculture and Trade Policy                                   |
| IAWG    | Inter-Agency Working Group   |
| IBRD    | International Bank for Reconstruction and Development                        |
| IC      | Investment Climate   |
| ICR     | Implementation and Completion Report   |
| ICRISAT | International Crops Research Institute for Semi-Arid Tropics                 |
| ICSID   | International Center for Settlement of Investment Disputes                   |
| IDA     | International Development Assistance   |
| IEED    | International Institute for Environment and Development                      |
| IFAD    | International Fund for Agricultural Development                              |
| IFC     | International Finance Corporation  |
| IFIs    | International Financial Institutions   |
| IFPRI   | International Food Policy Research Institute                                 |
| IGR     | Investments for Governance Reform  |
| ILC     | International Land Coalition   |
| IMF     | International Monetary Fund  |
| IPM     | integrated pest management   |
| IPR     | Intellectual Property Rights   |
| IRR     | Internal rate of return  |
| ISDS    | Investor-State Dispute Settlement  |
| KASAMA  | Kahugpungan sa mga Mag-uuma  |
| LBP     | Land Bank of the Philippines   |
| LGC     | Local Government Code  |
| LOI     | Letter of Intent   |
| MFI     | Microfinance institution   |
| MIGA    | Multilateral Investment Guarantee Agency (World Bank)                        |
| MNC     | Multinational corporation  |
| MRDP    | Mindanao Rural Development Project   |
| NEDA    | National Economic and Development Authority                                  |
| NEPAD   | New Partnership for Africa's Development                                     |
| NIA     | National Irrigation Administration   |
| NOW     | Noble, Olam, Wilmar  |
| NRM     | Natural Resource Management  |
| ODA     | Official Development Assistance  |
| OECD    | Organisation for Economic Co-operation and Development                       |
| PANAP   | Pesticide Action Network Asia Pacific  |

|        |  |
|--------|--|
| PCFS   | People's Coalition on Food Sovereignty   |
| PCP    | Pearl Capital Partners   |
| PEDSA  | Strategy Plan for the Development of the Agricultural Sector (Mozambique)  |
| PKA    | Pensionskassernes Administration   |
| PNISA  | National Agricultural Investment Plan (Mozambique)   |
| PPP    | Public-private partnership   |
| PRAI   | Principles for Responsible Agricultural Investment that Respects Rights, Livelihoods and Resources   |
| PRDP   | Philippine Rural Development Program   |
| PSA    | Philippine Statistics Authority  |
| PSOD   | Private Sector Operations Department   |
| PTA    | Preferential Trade Area  |
| PVP    | Plant Variety Protection   |
| RI     | Rural Infrastructure   |
| ROI    | Return on Investment   |
| SADC   | Southern African Development Community   |
| SAPs   | Structural Adjustment Programs   |
| SIGA   | Sustainable Rural Income Generating Activities   |
| SME    | Small- and medium-sized enterprise   |
| SUN    | Scaling up Nutrition   |
| TAAS   | Technical Assistance Advisory Services   |
| TPP    | Trans-Pacific Partnership  |
| UNCTAD | United Nations Conference on Trade and Development   |
| USAID  | United States Agency for International Development   |
| VGGT   | Voluntary Guidelines for the Responsible Governance of Tenure of Land, Fisheries, and Forests in the Context of National Food Security (FAO) |
| WDR    | World Development Report   |
| WEF    | World Economic Forum   |
| WFP    | World Food Program   |
| WHO    | World Health Organization  |
| WTO    | World Trade Organization   |

**PART ONE**

**The Financialization of Food in East Africa:  
The Role of Charitable Foundations  
and Global Agricultural Initiatives**

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**Executive Summary**

1. Over the past decades, our global food systems have been greatly affected by growing pressure on finite and scarce land and water resources, which in turn results in a greater demand for these resources (Miller et al. 2010). This dynamic has intensified interest in land and food systems and is reshaping the agricultural sector worldwide.
2. In parallel and very much in connection with these drivers, heightened financial deregulation over the last 30 years has exacerbated the connections between finance and food markets, making these more intricate (Miller et al. 2010). A wide array of investors has started to engage in food commodities, which greatly affects food trade and price volatility (Murphy et al. 2012). Given the rising emphasis on competitiveness and profitability in a context of interlinked food-water-energy-climate-finance crises that further inflate commodity prices, and the related abstraction of the financial product from its physical form (Clapp 2013), food is de facto becoming financialized.
3. The financialization of food can be defined as both a virtual and a physical phenomenon. In the first instance, it refers to the larger role that investors play in food commodities and speculation and how this influences food trade, price volatility, and behaviour. In the second instance, it refers to the role these investors play in food production and how this impacts local smallholder farmers' livelihoods, the environment, and sub-regional agricultural systems and commons (Murphy et al. 2012).
4. Highly complex financial instruments have thus emerged in the agricultural sector, many of which are speculative in nature, with non-listed funds being the most common and influential form of financial instruments in Africa's food sector (Miller et al. 2010). Agriculture is now regarded as an asset class, which includes commodities, equities, and farmland (Chen et al. 2013). Among the main categories of financial assets used by these financial players are private equity funds not listed on the stock exchange, managed investment trusts, and agricultural investment funds.
5. But investors are also increasingly investing in food production per se, with large land deals making way for agro-business investments. In the wake of the 2008 food crisis, agribusiness's attention indeed shifted towards the need to source crops directly, hence the land rush observed in recent years (Cotula 2012). The majority of these new land investments were located in Sub-Saharan Africa. Agribusiness and industry were and still are the main drivers of so-called land grabs. but investment funds appear to be playing a greater part in this phenomenon (Daniel 2012; Fairbairn 2014).
6. The investors in question include institutional and financial investors (e.g., insurance companies, pension funds, mutual funds, sovereign wealth funds, hedge funds, university and

foundation endowments, and commercial banks); development finance institutions (DFIs) (e.g., government-funded investment corporations such as development banks that play a significant part in the increase of financial flows in the African agricultural sector); and private investors (e.g., wealthy individuals, corporate entities, investment houses, and foundations). Of significance is the fact that this financialization phenomenon is not only driven by external factors; Africans remain the primary investors in the continent's food sector. Africa's emergent middle class thus constitutes a critical factor to consider when discussing the region's food security (Jayne et al. 2014a).

7. This paper construes the financialization of food through a wider and more critical lens as it looks closely at the prime movers of a green revolution for Africa – namely, the Alliance for a Green Revolution for Africa (AGRA). The most important protagonists of AGRA include the Bill & Melinda Gates Foundation, as well as several international public-private partnerships (PPPs) that were born at the turn of the millennium to promote market-based models of agricultural development, such as the New Alliance for Food Security and Nutrition (G8NAFSN), the New Food Alliance (under which the Grow Africa initiative falls), and the African Fertilizer and Agribusiness Partnership (AFAP). Their involvement in shaping agro-food value chains and markets in Africa intrinsically forms part of this financialization phenomenon, as this global agenda to push for a greater involvement of private entities in Sub-Saharan Africa's agro-food chain allows for the “financial motives” (Epstein 2005) of these entities to gain importance in the region.
8. An analysis of the role and channels of influence of these PPPs in East Africa shows that they garner influence by nurturing linkages between public actors (development agencies) and private actors (corporations) to serve a specific agenda. In many instances, DFIs (several sovereign funds/development agencies) are very much associated with private ventures under the common umbrella of AGRA. It can be argued that the involvement of DFIs is a pre-condition to pave the way for corporations by creating markets, as this can prove a costly venture. PPPs sway the African agricultural sector in two ways: by supporting the entry of private sector entities (from the North) into these coveted agricultural value chains and agro-businesses (in the South); and by shaping agricultural policy (notably seed and fertilizer measures) and pushing for technology transfer. These PPPs have been vehemently criticized for using public resources to support private investments in capturing supply chains under the guise of development. They are inherently driven by financialization and globalization, as the majority of small-scale farmers in Africa will require some form of credit to purchase expensive inputs, such as certified seed and fertilizers. If this trend finds its roots in the financialization of food, what is essentially under discussion here is the corporatization of the agricultural sector.
9. This report investigates whether and how this financialization and corporatization of food affects local and regional agricultural systems and commons, food security, smallholder farmers' livelihoods, social welfare, and environmental sustainability in Sub-Saharan Africa, with a specific focus on East Africa. To further contextualize the research, the examination of these trends is anchored in the case study of Mozambique, which has tremendous agricultural potential and yet is highly vulnerable to food shortages and reliant on food imports. Mozambique is at the heart of the push for a green revolution in Africa, propelled by AGRA, the G8NAFSN initiative, and the AFAP. An AGRA breadbasket priority country, a country pushing for “growth corridors” (ACB 2015c; UNAC & GRAIN 2015), and a country that counts the highest number of land deals on the continent, Mozambique is a relevant case study for the financialization of food.

10. In the East African region, the countries that have received the most attention in terms of land deals are Mozambique followed by Ethiopia, the United Republic of Tanzania, Sudan, Uganda, South Sudan, Madagascar, Kenya, Rwanda, and Mauritius. Agri-investors in the region are mainly interested in cash crops. Though agriculture is indeed the main driver behind the rush for land (representing 70 percent of the size and 65 percent of the number of land acquisition cases in Southern Africa), food crops account for only 21 percent of the total land acquisition cases in Southern Africa (Anseeuw and Boche 2012). Non-food crops, so-called flex crops (i.e., crops with diverse purposes, such as palm), and multi-crop projects account for 50 percent, 12 percent, and 7 percent of cases, respectively. This has tremendous implications for the types of agricultural models developed locally and for food security.
11. Host countries have played an active part in promoting such investments in their own land, spurred by the goal of development and the seeking of foreign capital. In the case of Mozambique, following the end of the civil war in 1997, the government actively marketed productive land that is strategically located close to the South African market and ports. Applications for land from potential investors poured in, with the number of informal requests covering 13 million hectares of land, or over 37 percent of the country's territory. An audit commissioned by the government revealing the extent of these requests, and the fact that less than 50 percent of the land awarded had actually been used (Deininger et al. 2011), triggered a shift in policy towards stronger requirements and a temporary moratorium on land allocated for biofuel projects. Despite these regulations, between January 2004 and June 2009, 2.7 million hectares were transferred in Mozambique (Deininger et al. 2011).
12. The latest Land Matrix data available for Mozambique recorded 109 land deals, of which 76 had been concluded and 33 were under discussion. Of the total 76 contracts signed, some were abandoned and others had not reached implementation. At the time of research, all 16 of the biofuel projects had been concluded, and of the 52 food-related investments, 29 were being negotiated.
13. Numerous accounts and case studies document loss of land and livelihoods resulting from forced displacement of rural communities to make way for large land investments, with the collusion of the Mozambican government (GRAIN 2015). In most cases, land deals took place without community consultation or with the local population being misled on project impacts and promised significant returns. Often the areas where they are resettled do not offer the same farming potential as their area of origin. UNAC & Justiça Ambiental (2011) point to cases where rural communities in Mozambique were resettled to semi-arid lands not suitable for agriculture; in some instances, these displacements have taken place with flagrant human rights abuses.
14. By the same token, African agricultural growth corridors are being developed under the aegis of Grow Africa, with the overt intention of bolstering commercial investment in the agricultural sector of these countries. The Government of Mozambique is investing heavily in infrastructure development in these corridors, the most important of which are the Beira corridor, the Zambezi Valley corridor, and the Nacala corridor. The latter is home to the ProSavana project, which aims to convert 14 million hectares of land currently under cultivation by smallholder farmers into large-scale foreign-run farming operations to produce agricultural commodities for export (UNAC & GRAIN 2015). It is also within this corridor that the Lúrio River Valley Development Project falls, where the plan is to build two hydroelectric dams, to set up an irrigation scheme covering 160,000 hectares, and to develop an additional 140,000 hectares for rain-fed agriculture, contract farming, and livestock production. The

crops (cotton, maize, and cereals) are geared for the export market; preliminary estimates are that the project will affect the livelihoods of over 500,000 people (UNAC & GRAIN 2015).

15. The report unearths the multi-pronged impact of such trends, starting with an analysis of how the financialization of food is reshaping agrarian systems in the sub-region, followed by a detailed review of economic, social, and environmental impacts, with a specific focus on the Mozambican case.
16. The financialization of food in Africa, which effectively translates into embracing the Green Revolution paradigm, has precipitated a “new phase of accelerated agrarian change” in the continent (Badiglioni & Gibbon 2013). These investment trends entail the adoption of large-scale monoculture practices to the detriment of subsistence practices and knowledge. Land deals contribute to the global extensification of the food production base, while large agro-business investments supported by PPPs contribute to the intensification of food production. Together, these aim to ensure that all the elements of modern agriculture are brought to Africa.
17. Although investors emphasize the benefits of commercializing agriculture in Africa, the gains accruing to small-scale farmers remain questionable, as these developments clearly focus on producing commodities for international markets rather than advancing local food security and sovereignty (Paul & Steinbrecher 2013; ACB2015c; ACB 2015d; UNAC & GRAIN 2015). Evidence from recent research suggests that it is essentially investors who get returns through increased land values and productivity, be it for speculation, biofuel, or food production (Mbataru 2014). The returns for local people tend to be limited to employment (if any) or social infrastructure (Buxton et al. 2013). The cumulative acquisition of large areas of land in Africa will cause an irreversible shift away from family farming, the backbone of African agriculture, towards large-scale farming (Buxton et al. 2012), and lead to greater concentration of commercial power within a few agribusinesses.
18. The implementation of AFAP in Mozambique offers a good illustration of how this programme has created new socio-economic dynamics and dependencies and is transforming local agrarian economies, making local farmers more vulnerable rather than building their resilience and growing their businesses. The inclusion of banks in AFAP’s operating parameters mitigates risks for private companies, while small-scale farmers face increased risks in terms of repayment of debts. The imperative to repay debts will lock small-scale farmers into purchasing fertilizers to maintain productivity (ACB 2015a). Further, this dependence on global export markets and artificial inputs in turn pushes farmers to produce cash crops at the expense of subsistence crops.
19. The evidence of economic returns at national and local levels remains scarce, especially if we take into account the fact that tax breaks granted by host countries to big agribusiness projects reduce public revenues which could be channelled towards social services and supporting small-scale farmers (Buxton et al. 2012). The question of food repatriation is also seminal; to date, two thirds of land deals in Africa have taken place in countries confronted by food shortages. Therefore, the important question is whether large agricultural investments can resolve local agricultural problems.
20. Green revolution proponents disregard the ecological legacy of high-input farming practices. These include increasing nutrient depletion of soils, groundwater depletion, salinization, soil water nitrification, and waterlogging, as well as contributing to climate change. The harm caused to local ecosystems bears directly on food security.



21. The research proposes a reflection on possible alternatives to the financialization of food that are farmer-centred, not exclusively profit driven, that foster just economic relationships, and that encourage ecological renewal. A new notion emerging in this sense is that of life-giving agriculture, which holds in balance efforts to satisfy human needs and the impetus of caring for nature – which is the source of life and livelihoods. In this respect, the research strives to bring forward key principles that could help reverse the observed trends, and include an agriculture that puts farmers first, that is adapted to local conditions, that provides a nutritious and balanced diet, and that enhances mental and spiritual health.
22. Several sets of international regulations guiding foreign investment flows in developing countries have been developed. These could ensure that local farmers enjoy genuine gains while guaranteeing compliance with Environmental, Social and Governance Criteria, yet the question remains whether these will prove powerful enough to curb the adverse impacts of the financialization of food. In this respect, the research identifies possible levers of change, such as inclusive investment models, capital investments that ensure responsible financialization of food, and divestments.
23. The research ends with a reflection on what could constitute agricultural approaches that are aligned to life-enhancing principles, briefly exposing the principles of agro-ecology and biodynamic agriculture. The research concludes that a deeper understanding of how local food systems function is critical to our attempt to picture alternative models of agriculture, which calls for further research.

## Introduction

### *A historically unprecedented wave of investments in agricultural land and commodities*

Agriculture is the most important sector of activity in developing countries, with about 70 percent of the world's poor being involved in farming (IAASTD 2009:65) – a figure that rises to about 85 percent when considering Southern and East Africa (International Fund for Agricultural Development [IFAD] 2014). As such, agriculture is a fundamental instrument for sustainable development of Sub-Saharan African countries; the success of the agricultural sector is in turn dependent on sustained investments in the sector, although it can be contended that once an agricultural system has reached high resilience, the levels of investments required diminish significantly. But as we shall see, we are not talking about just any investments. The way funds are directed into the sector, the underlying motivations of the investors, and the way in which these end up shaping food systems have very deep and intricate repercussions on the viability of these food systems and on their ability to sustain local livelihoods, the commons, and ecosystems.

The 2008 food crisis, which took place in the wake of higher oil prices and speculation, simultaneous with the global financial crisis, marked a clear shift in existing patterns of agricultural financial flows, spurring international interest in the agro-food sector and agricultural land as potential investments. Worldwide, agricultural investments have reached new heights in volumes and in value and differ from the – until then – prevailing traditional forms of international investments in the agro-food sector, which primarily focused on providing better access to markets or cheaper labour. One of the most recent analyses of media reports on the topic indicates that in 2015, some 33 private equity–focused agriculture funds sought to raise a combined US\$8.5 billion globally (Jacobius 2015) (the volumes of investments to Sub-Saharan and more specifically to East Africa are discussed in section 2).

Beyond agro-business investments, investors expressed interest in 42 million hectares of agricultural land globally less than a year after the food crisis. Of these, **more than 75 percent (i.e., 32 million hectares) were located in Sub-Saharan Africa** (Horlings & Marsden 2011). Contemporary agricultural investments appear to be spurred by investors' interest in gaining access to natural resources, such as land and water, which has given way to the highly mediatized and criticized so-called **land grabs**<sup>2</sup> (FAO 2013a). Where agricultural investments used to focus on the production of tropical crops for wider commercial export, they now increasingly concern the production of basic foods, including animal feed, for export back to the investing country (Hallam 2011).

Another key dimension of this phenomenon pertains to **the velocity and rate at which land changed hands between around 2004 and 2009**, which is reported to be unprecedented in the history of postcolonial Africa. The continent is depicted as the ultimate investment frontier (Baglioni & Gibbon 2013), and this is not fortuitous; according to Deininger et al. (2011), 45 percent of global uncultivated land availability is in Africa. But governance issues, corruption, poor records of formally recognized rural land tenure, and the possibility of influencing (notably, biosafety and seed

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<sup>2</sup> Land grabs are defined by the Tirana Declaration from the International Land Coalition as any land deal which entails: “ i) a violation of human rights, particularly the equal rights of women; ii) (lack of compliance with) the principle of free, prior and informed consent of the affected land-users; iii) (the transfer of land that is) not based on a thorough assessment, or in disregard of social, economic and environmental impacts, including gender impact; iv) (the transfer of land that is) not based on transparent contracts that specify clear and binding commitments about activities, employment and benefit sharing, and; v) (the transfer of land that is) not based on effective democratic planning, independent oversight and meaningful participation. See <http://www.landcoalition.org/about-us/aom2011/tirana-declaration>.

legislation) under the guise of a benevolent rhetoric of modernization and economic opportunities also make the continent an appealing place to capitalize on agricultural investments, despite the level of risks these same factors present.

### *What is meant by the financialization of food?*

The financialization of food will be discussed in detail throughout the paper; for the purpose of the research, the author has opted to adopt Murphy, Burch & Clapp's (2012) analytical framework. They draw a distinction between the increasingly preponderant role that **investors play in food commodities (the virtual dimension)**, and how this shapes food trade, price volatility, and behaviour, and the **role these investors play in food production (the physical dimension)**, and how this impacts local smallholder farmers' livelihoods, affects the environment, and shapes sub-regional agricultural systems and commons.

Another critical dimension that the paper will focus on relates to the protagonists of a Green Revolution for Africa: namely, the Alliance for a Green Revolution for Africa (AGRA), essentially funded by the Bill & Melinda Gates Foundation (BMGF); the New Alliance for Food Security and Nutrition (G8NAFSN); the New Food Alliance; and the African Fertilizer and Agribusiness Partnership (AFAP). The BMGF is the most influential 'charitable' foundation in Africa.<sup>3</sup> The initiatives the BMGF and other public 'charitable' foundations support – by typically seeking out private funding and, as we shall see, by very much subsidizing private interests – are commonly known as public-private partnerships (PPPs) and will be referred as such throughout the report. Their involvement in shaping agro-food value chains and markets in (East) Africa intrinsically forms part of this financialization phenomenon, as this global agenda to push for a greater involvement of private entities in Sub-Saharan Africa's agro-food chain allows for the "financial motives" (Epstein 2005) of these entities to gain significant importance in the region. If this trend finds its roots in the financialization of food, what is essentially under discussion here is the **commodification of the agricultural sector**, which represents an important aspect of this paper.

### *The critical issue of agricultural investments in Sub-Saharan Africa*

The financialization of the food sector took place in a global context of **incremental inequalities between rich and poor** and tenuous food security for some of the poorest countries,<sup>4</sup> but also in a global context of stagnant wages and a rising volume of debt (Isakson 2014:751); this further undermined the ability of least-developed countries to provide safety nets for their populations. What is striking when engaging with the literature on agricultural investments in Africa is apprehending both **the immensity of the recent flows in the sector contrasted with counts of "persistent underinvestment" in the sector**. Agricultural investments in developing countries come with several caveats, yet the necessity for greater agricultural investment in the continent is widely recognized (FAO 2012; FAO 2013b; World Bank 2009; World Bank 2015).

The legitimate condemnation of irresponsible investments shouldn't overshadow the dire need for investments in the sector; the key issue is to determine what types of investments and where these investments should be directed to ensure they benefit local communities. Several sets of **international regulations** guiding foreign investment flows in developing countries have been

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<sup>3</sup> A charitable entity is officially recognized as devoted to the assistance of those in need. The term originates from the Middle English, in the sense 'showing Christian love to God and man', a religious root, which is quite a propos in the context of this study. Because the effective charitable objectives of the foundation are, as we shall see, dubious and questionable, the epithet 'charitable' is presented here in inverted commas.

<sup>4</sup> According to the United Nations, worldwide food production will have to increase by 70% from current levels to meet the needs of 9.1 billion people by 2050 (FAO 2009).

developed; these could play a critical part in ensuring genuine local benefits while guaranteeing compliance with **Environment, Social and Governance (ESG) principles**. Yet the question remains whether these will prove powerful enough to curb the adverse impacts of the financialization of food (see section 6).

### *Structure of the report*

The paper begins by providing some background on the financialization of food and explains the mechanisms underpinning the enrichment of investors through agricultural assets (section 1). This is followed by an overview and analysis of investment flows in (East) Africa, looking at who the actors of this financialization trend are, their motivations, and how PPPs specifically influence food systems in Sub-Saharan and especially in East Africa (section 2). The paper then proposes an analysis of these financial flows and investments, looking specifically at investments in agro-food value chains and in farming land (section 3). Flowing from this, we look closer at these actors' *modus operandi*, that is, the types of financial instruments and investment vehicles used by investors, with a specific interest in agricultural investment funds (AIFs) and large land deals (section 4). The report then highlights the agricultural models emerging from this financialization of food and examines the various economic, social, food, and environmental impacts thereof in (East) Africa (section 5). The concluding chapter attempts to explore alternatives to agricultural models that are not beholden exclusively to a profit logic. On the basis of principles defining life-enhancing agriculture, the paper discusses possible levers for change towards life-enhancing food systems (section 6).

### *Limitations of the study*

The literature exploring this phenomenon is paradoxically both very dense and fairly limited. On the one hand, understanding this financialization trend implies immersing oneself in the complexities of global finance and the plethora of new financial products and vehicles born from the unprecedented deregulation of the sector and how these apply to food systems. One also needs to grasp the dissenting views prevailing on the root causes of the 2007–08 food crisis and subsequent tremendous fluctuations in food prices, as there is no consensus on the matter (Fairbairn 2014).

On the other hand, understanding this phenomenon would ideally entail having access to readily available and transparent information on the motivations and activities of these new investment trends in East Africa. But this is a very challenging task, and research on this topic is still in its infancy, with researchers having to own the trust of investors who are often reluctant to share information openly. The impact analysis of such phenomena is also hindered by the fact that we lack the required hindsight on how many of these investments will unfold, as there is no documented evidence of exit strategies in the region or continent to date.

The literature only started expanding on this topic less than 10 years ago; until recently, many aspects of the financialization of the agro-food value chain still remained under-researched (Isakson 2014). A recent wave of publications<sup>5</sup> anchored in food studies has, however, been investigating this phenomenon more closely, but it is very much linked to grassroots research and it lacks country-specific focus. Another research community looking at the financialization of food is called the “commons movement”;<sup>6</sup> phenomena such as land grabbing are, for instance, analyzed through the lens of “enclosure of the commons” (Tricarico n.d.).

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<sup>5</sup> See, for instance, the recent publication by Canadian Food Systems 2015: *Special Issue: Mapping the Global Food Landscape* 2(2), <http://canadianfoodstudies.uwaterloo.ca/index.php/cfs/index>.

<sup>6</sup> See <http://www.wealthofthecommons.org/contents>. The commons are defined as “the shared resources which people manage by negotiating their own rules through social or customary traditions, norms and practices” and which are to be

The literature, however, remains sufficient to apprehend the impacts that this financialization has had thus far on local food systems and ecosystems and that forms the main rationale for this paper. Although essential elements on the financialization of food and how it has played out in our region of interest is discussed, the focus of this paper is, rather, focused on sharing insights in terms of what these trends entail for Sub-Saharan Africa populations and to explore leads on how to orientate the efforts of organizations backing African societies at large, and farmers more specifically, on how to foster life-enhancing agriculture.

### *Case study: Mozambique*

The research discusses financialization trends in Sub-Saharan Africa with a specific focus – where data is available – on East Africa. To further root the research, the examination of these trends is further anchored in the case study of Mozambique. But the paper also draws from other African country experiences, where relevant (e.g., Tanzania, Zambia, and Ethiopia).

The rationale for linking this paper with a specific case study is to provide the reader with tangible illustrations of how the discussed multifaceted financialization of food effectively manifests on the ground, thus adding value and contextualizing the theoretical discussion.

Mozambique was selected as a case study country for this study for the following reasons:

- Mozambique falls within the top quintile of countries **vulnerable to food shortages**, as confirmed by the dramatic impact that **food price hikes have had on the country** since late 2010. Despite a record harvest in Mozambique in 2010, the country still had to import a quarter of its food (Oxfam 2011a). Despite its tremendous agricultural potential, Mozambique is still extremely dependent on food importation;
- Given its agricultural potential, Mozambique is at **the heart of the push for a Green revolution for Africa**, propelled by AGRA (and forms part of its breadbasket priority countries), the G8NAFSN initiative, and the AFAP.
- Also, the push for **growth corridors** in Mozambique is among the strongest in the East African region (ACB 2015c; UNAC & GRAIN 2015; GRAIN 2016). These corridors have become catalyst areas for **international land deals**, the scale of which has seen exponential growth over the past decade.
- The involvement of **actors driving the financialization of food** in East Africa – be they institutional entities, state-owned entities, or private investors – is significantly facilitated by these partnership initiatives, and the number of land deals in Mozambique is the highest in the continent.

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distinguished from public goods, which are managed through “a social mandate,” as opposed to commons, which are managed through “social mutuality”) (Quiligan n.d.).

### **Box 1.: Background on Mozambique**

Since the end of the civil war in 1992, Mozambique has made major strides to stabilize its economy and steer the country towards reconstruction. However, it has remained reliant on development aid, with up to 40 percent of its 2012 annual budget stemming from donor funding sources. Fifty-two percent of its population remained below the poverty line in 2012 (CIA World Fact Book 2013).

Subsistence rain-fed agriculture employs the vast majority of the country's workforce, with close to 64% of the population living in rural areas (Food First Information and Action Network [FIAN] 2010). Most of the agriculture is small scale and family based, with no or limited external inputs, be it for subsistence production (with maize as the main crop) or for commercial purposes (sesame seed, tobacco, and cotton are the main export crops) (Sitoe, Salomão & Wertz-Kanounnikoff 2012). This low agricultural land use intensity also means that little of the arable land is used optimally – of an estimated 36 million hectares of arable land, only 10% is currently put to productive use (World Bank 2013a).

The government is introducing a range of economic reforms, such as the large-scale privatization of state-owned enterprises, and is actively seeking foreign investment in the country. Recent legislative changes in Mozambique have significantly eased foreign investments and the repatriation of capital to attract investments (Miller et al. 2010:16).

The recent discovery of large mineral resources (gas and coal) in northern regions has spurred intensive foreign investment into the country. The above has led to positive results: Mozambique grew at an average annual rate of 6% to 8% over the past decade, which represents one of Africa's strongest performances (CIA 2013). The net inflow of FDI in 2013 amounted to US\$5.9 billion, up 15.8% from 2012, making Mozambique the third-largest destination for FDI in Africa in that year (National Bank of Mozambique 2013). Much of this capital has gone into resource extraction, such as mining and exploration of hydrocarbons. But agriculture is also emerging as an important target of foreign companies, with reports of ongoing large agribusiness investment taking place along Mozambique's strategic growth corridors (see Box 5). However, the redistributive effects of such large investments has come under scrutiny. The exploitation of these newly discovered resources indeed raises concerns with regards to lack of transparency, socio-economic shortcomings, and environmental degradation (Kabemba & Nhancale n.d.). Inequality appears to be declining, although it is still quite high, as shown by the decrease of the GINI coefficient from 0.473 in 2002 to 0.456 in 2008.<sup>7</sup>

The national strategies related to the agricultural sector include the Strategic Plan for Agricultural Development (2010–2019), which emphasizes the need to increase food and market-oriented production, and to promote market linkages and the sustainable management of natural resources (IFAD 2014). The country launched its Green Revolution Strategy in 2007, in response to high food and fuel prices.<sup>8</sup>

Mozambique is one of AGRA's Portfolio One countries, meaning that the Green Revolution is catalyzing on this country (together with Ghana, Mali, and Tanzania) as it represents a "change-ready country with high-potential breadbasket areas"<sup>9</sup> (Harvest Choice 2015). The country is also at the nexus of other international partnership initiatives, namely the G8NAFSN, the New Food Alliance, and the AFAP.

<sup>7</sup> See [http://www.indexmundi.com/mozambique/distribution\\_of\\_family\\_income\\_gini\\_index.html](http://www.indexmundi.com/mozambique/distribution_of_family_income_gini_index.html).

<sup>8</sup> See [http://www.fsg.afre.msu.edu/mozambique/caadp/Strategy\\_Green\\_Revolution\\_English%20final\\_021107\\_Eng\\_v2.pdf](http://www.fsg.afre.msu.edu/mozambique/caadp/Strategy_Green_Revolution_English%20final_021107_Eng_v2.pdf).

<sup>9</sup> See <http://harvestchoice.org/products/data/1354>.



# 1. Background on the financialization of food

## 1.1 What is meant by the financialization of food?

*Farmland [is] a productive asset that moonlights as a financial asset.* (Fairbairn 2014:2)

The most frequently cited definition of financialization is proposed by Epstein, who describes it as the “increasing importance of financial markets, financial motives, financial institutions, and financial elites in the operation of the economy and its governing institutions, both at the national and international levels” (2005). Ouma goes beyond this definition, which is centred on actors, and defines it as the “more general penetration of food production and agro-food chains by ‘finance capital’” (2014:163). Another definition that adds value for the purpose of this paper is proposed by Krippner (2011:4), who sees this phenomenon as “the tendency for profit making in the economy to occur increasingly through financial channels rather than through productive activities.” This definition, which clearly pitches financial avenues (the virtual economy) against productive means (the real economy), allows us to get a better grasp of the phenomenon at play in the agricultural sector.

Murphy, Burch & Clapp (2012) use a different lens to convey this distinction between finances (virtual) and production (real) by focusing on the increasingly important role investors play in food commodities, and on the role these investors play in food production.<sup>10</sup>

- In the case of financial investments in food commodities, this calls for looking at how investors’ speculative involvement in food as commodity is delinked from any interest “in taking possession of any physical commodity” (Murphy, Burch & Clapp 2012:6)<sup>11</sup> and how this shapes the physical trade of food, food price volatility, and behaviour.
- In the case of food production, financialization refers to how various investment funds are “buying or leasing land and producing agricultural commodities” (Murphy, Burch & Clapp 2012:6) and how this in turn affects local smallholder farmers’ livelihoods, affects the environment, and shapes sub-regional agricultural systems and commons.

Whereas banks have traditionally played a part in the production of food through providing capital (loans, credit, overdraft facilities, etc.), what has fundamentally changed over the past decades and marks the financialization of food is that the banking sector had never before “sought ownership of farm properties, nor invested in agricultural production by acquiring a share of the equity in parts of the agro-food supply chain” (Murphy, Burch & Clapp 2012), which is precisely what the current trend is about. In recent years, **banks and other financial players have started shifting from their traditionally held vision that agriculture was a risky venture that generated low returns.** Today, “asset management companies, private equity consortia, merchant banks, superannuation/pension funds, hedge funds, [and] sovereign wealth funds” have been increasingly involved in agricultural production, processing, and distribution, and are at times “actively involved in the day-to-day management of on-farm operations” (Murphy, Burch & Clapp 2012). The food system has come to be seen as a sector that will guarantee long-term growth and, to put it in financial terms, **agriculture**

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<sup>10</sup> See how Isakson (2014) argues that on the one hand, agro-food systems have become more involved in financialization, and on the other hand, financial actors have in turn become more involved in agro-food systems (section 3.3).

<sup>11</sup> “Today, banks and other investors, as well as dedicated investment funds established as subsidiaries of [large grain firms], have invested billions of dollars in food commodities with no interest in taking possession of any physical commodity. Their behaviour is intimately linked to what is happening in the physical trade of food, of course, but it also affects that trade by affecting prices and behaviour” (Murphy, Burch & Clapp 2012:6).

is now regarded as an “asset class” (Chen et al. 2013). This agricultural asset class includes commodities, equities (public shares), and farmlands (Ducastel & Anseeuw 2014).

### *Beyond the financialization of food: The commodification of food*

Beyond these considerations on the incremental role played by financial actors in Africa’s food system, the paper will also consider the increasingly important role played by corporate entities involved in African food systems. This aspect of the discussion specifically relates to how PPPs, propelled by financial injections from industrial countries, are involved in the so-called improvement of Africa’s agricultural sector, notably through the promotion of a **Green Revolution for Africa**. The key parties involved in this new global agenda are the African Partnership for a Green Revolution for Africa (AGRA), essentially funded by the Bill & Melinda Gates Foundation (BMGF); the New Alliance for Food Security and Nutrition (G8NAFSN); Grow Africa; and the African Fertilizer and Agribusiness Partnership (AFAP).

Their involvement intrinsically forms part of this financialization phenomenon, as this global agenda to push for greater involvement by private entities in Africa’s agro-food chain allows for the “financial motives” of these entities to play a greater part in Sub-Saharan Africa’s food systems (Epstein 2005). In this respect, the phenomenon under consideration is the commodification of the agricultural sector, which is facilitated by the liberalization of the sector and the rising interests of numerous financial institutions and elites.

### *Drivers of financialization*

Beyond the fact that in the wake of the 2008 food crisis, land has started to be seen as a tangible hedge against inflation, making it an increasingly important asset class for portfolio diversification purposes, other fundamental factors drove the incremental interest in agriculture, defined by Miller et al. (2010) as “a perceived general mismatch between supply and demand in favour of the investor’s side” (2010:9). A summary of these drivers is captured as follows:

- the decreasing per capita availability of land consumption (Miller et al. 2010);
- an anticipated increase in commodity prices over the long term (as witnessed in 2007–08) due to finite resources and a growing global population (Miller et al. 2010);
- the increasing levels of investment by land-poor and food-deficient countries; (Murphy, Burch & Clapp 2012); nations with limited land and water endowments, such as Qatar and Saudi Arabia, are indeed key players in land acquisitions in Africa;
- increases of the purchasing power of the population in some emerging economies (Miller et al. 2010), such as China and India, where the transition towards protein-rich diets further aggravates this global squeeze (see next point);
- the shift towards meat-based diets. Meat production requires 80 percent of the amount of agricultural land, while it accounts of only 15 percent of total food consumption (Van Vuuren & Faber 2009). Currently, over a third of the world’s grain is fed to livestock, rising to nearly 70 percent in industrialized countries (Horlings & Marsden 2011);
- exogenous drivers are also contributing to putting more pressure on farmland, such as investments in tree plantations or agro-industrial crops (rubber, oil palm, etc.) (Cotula 2012), but also in crops for bio-energy production (Anseeuw et al. 2012).<sup>12</sup> The demand for food as fuel has grown exponentially, as biofuels are increasingly seen as a response to climate change mitigation, especially in industrialized or emergent countries, which set biofuels targets within

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<sup>12</sup> Non-food crops represent a significant portion of land acquisition in the observed countries, an aspect that is a great concern for a region that is essentially importing food (Anseeuw et al. 2012).

their energy mixes. Increased biofuel production has contributed to the financialization of food, as crops grown for fuel inherently compete with crops grown for food. Global ethanol production thus tripled between 2002 and 2007, and is projected to double again by 2017 (Macquarie Agricultural Funds Management ABN 2010).

- outside the agricultural sector, expansion of petroleum, mining, and tourism-related investments also put pressure on land (Cotula 2012);
- the creation of carbon credits and water rights markets (Murphy, Burch & Clapp 2012).

All these factors pushing the demand side need to be correlated with **increasing pressures on the supply side**, which entail:

- finite and scarce land and water resources (currently, 70 percent of the world's freshwater is used for agriculture – with the growing concern that extraction is happening faster than replenishment capacity);
- urbanization trends which have precipitated a shift of employment to the non-farm sector;
- environmental degradation worsened by climate change and thereby increasing demand on these resources (Miller et al. 2010).

In this context of multipronged **food-water-energy-climate-finance crises** that further drives the inflation of commodity prices, investors end up being even more “pushed ... towards this emergent asset class” (Chen et al. 2013).

## 1.2 How do agricultural assets effectively lead to profit making?

All these considerations relating to agriculture as an emergent asset class lead to the question of how these investments constitute channels of enrichment for investors. The most immediate way investors can make profit from agricultural assets is by **profiting from the expected rise in agricultural prices**. Several vehicles exist to this effect: investors can purchase futures contracts that track specific food commodities (grain) or invest in commodity index funds (CIFs) or commodity exchange traded funds (ETFs). Another option is to invest in public companies operating throughout the agricultural value chain, such as fertilizer producers (Goldberg et al. 2012). **Investments in the value chain** play a critical role in driving the financialization of food, especially in Sub-Saharan Africa, where value-chain development and input production (seed, fertilizer, pesticides, and herbicides) form the backbone of major investments by international initiatives, such as AGRA.

### *Profit-making from commodity trading*

Concerns over the involvement of financial actors in the African agricultural sector essentially pertain to the fact that it is feared that institutional and private players carry out investments motivated by mere profit, which ends in an abstraction from the function of food (Clapp 2013). The literature abounds in consideration of how these financialization trends lead to the enrichment of actors in the value chain, especially commodity traders (Murphy, Burch & Clapp 2012). The difficulty here is that such investment markets straddle grey areas, and it is challenging to determine the intention of investors. **Private investors are exempted from reporting on the nature of their investments and their financial operations**. Murphy, Burch & Clapp (2012) explain the difficulty in defining whether the world's biggest commodity traders (Archer Daniels Midland [ADM], Bunge, Cargill, and Louis Dreyfus, collectively known as ABCD) are using their inside and prior knowledge of commodity markets to genuinely hedge their risks or speculate to exploit futures markets to secure profits for themselves. This fine line “hinges largely on whether they have a commercial need for the actual physical commodity they are buying or selling”; Murphy, Burch & Clapp conclude that both are involved, with “speculative behaviour hiding behind bona fide hedging” (2012).

### *Profit-making from land-related investments*

When it comes to farmland, some returns on investment forecasts are as high as 25 percent (Hawkins 2010). These returns are expected to be generated by a combination of **capital appreciation** (increased land values) and **income** flowing from net income stemming from operating or leasing the farmland (Goldberg et al. 2012) – the key driver of which would be increased productivity in agricultural production on acquired land.

#### ***Capital appreciation (virtual assets)***

In most cases, the investment vehicles used to invest in farmland or farmland-owning agribusinesses are **private equity funds** or funds that have a private equity-like structure (Daniel 2012). Since such funds typically operate on a relatively short and pre-determined time frame – seven to 10 years, on average – the means through which investors can use commodities to **extract value** is either through **taking the private fund public** through a public offering on the stock market; selling off the land/agricultural portfolio to a strategic buyer – in this case, typically an agribusiness entity; or **rolling these assets over into a new fund**, entailing that the land would still be owned by the investors (Daniel 2012; Fairbairn 2014). This essentially means that when it comes to land investments, investors access liquidity and make profit from the investment only once **the exit strategy** is consumed. In the case of the land/agribusiness investments made in Africa, generally speaking, there is **no documented case of any exit strategy by such private equity funds**. This is an important aspect to take into consideration in our analysis, indicating that it is still **too soon to fully apprehend the long-term implications of these virtual investments**. One could investigate what asset improvements could entail; indeed, soil improvements and property improvements are arguably put forward as means to improve portfolios by investors (Fairbairn 2014), but environmental damage, disrupted social fabric, etc. (section 5) are all highly potential risks. These considerations on investors' exit strategies beg the question of whether such assets would find buyers that can meet the average 3 to 25 percent (Ducastel & Anseeuw 2014) return expectations on the global market. What would be the profile of potential buyers that would be able to afford such investments in a region still viewed as risky, whereas similar land investments can be made relatively risk free in other parts of the world, as illustrated by the plethora of agricultural investments in other developing countries, especially Latin America and Asia (GRAIN 2012)?

#### ***Profit making from food production (physical assets)***

This dimension essentially relates to improvements in productivity, synergistically combined with access to cheap labour. According to the World Bank (2009), none of the Sub-Saharan African countries of most interest to investors are achieving more than 30 percent of the potential yield on currently cultivated areas (with the exception, perhaps, of South Africa). Consequently, **increasing productivity** on existing farmland could prove highly profitable.

In conclusion, the issue at hand is not so much that profit is realized, but the form of profit that is realized, and to determine **whether the virtual or tangible wealth that is created** (in the form of speculation or as a result of trade) **takes place at the expense of food security, social welfare, and environmental sustainability**. The underlying question is therefore to know whether and how financialization affects the production sector (section 5).

## 2. Overview and analysis of investment flows in food assets in (East) Africa

### 2.1 Mapping of global investors in agricultural assets<sup>13</sup>

This section aims to map the key agricultural investors involved in the agricultural sector in Sub-Saharan Africa, with a specific focus on East Africa. The source of the capital is mainly related to the **liability structure of investors** (Aglietta & Rigot 2009), and therefore weighs significantly on the investment policy of investors. This in turn shapes the **choice and expectations (on returns)** from their agricultural investments (Ducastel & Anseeuw 2014).

A typology of these investor categories, based on a general overview of the literature, is proposed below. Investors in agriculture can be broadly categorized into three main groups: institutional and financial investors; development financial institutions (DFIs); and private investors.<sup>14</sup>

#### *Institutional and financial investors*

Institutional investors include insurance companies, pension funds, mutual funds, sovereign wealth funds, hedge funds, and university and foundation endowments (Clapp 2013). Commercial banks can also be included in this category, as financial investors. These investors are typically described as being mostly passive in a large proportion of their investments, of which they can at times have partial knowledge. Given the large size of their investments, they tend to make **long-term investment decisions** that do not require active management (Clapp 2013). They started investing in commodities as an asset class after 2000, when food and energy commodities (for biofuel production) prices started shooting up. These actors typically got involved in the purchase of financial products from investment banks and the financial arms of commodity trading firms through CIFs and new derivative products (Clapp 2013).

#### *Pension funds*

Farmland became a big attraction to pensions – both the institutionally managed and individually held retirement accounts. After losses incurred in the subprime crisis, pensions sought to rebuild long-term holdings for their clients through new alternative asset classes (Ouma 2014). In the words of investment jargon used by such actors, farmland is seen as a “good fundamental,” meaning it offers sound prospects for long-term returns on investment in a world of scarce resources (land, water) and rising population (a rising demand which in turns adds value to the supply), with cash flow to be expected from crop sales, dairy production, or meat production (GRAIN 2011).

**Pensions represent by far the most important players among institutional actors**, holding about 31 percent of all the funds allocated to commodities and farmland among the US\$320 billion held by institutional actors in 2011 (Barclays Capital, cited in GRAIN 2011). In 2011, commodities made up 1 to 3 percent of pension funds’ portfolios, with the strategic intention of increasing this ratio to 3 to 5

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<sup>13</sup> Assets include farmland and production means throughout the value chain.

<sup>14</sup> Another typology of investors in farming assets is proposed by Schanzenbaeher & Allen (2015), who make a distinction between asset owners (insurance companies, family/private investors, pension funds, endowment funds/private foundations); asset managers (investments fund managers/private banks; private equity funds; hedge funds); land aggregators; sovereign wealth funds (state-owned investors); strategic corporate entities, including food companies; bilateral or multilateral development banks; the financial services sector, including commercial banks; commodity traders; and farmers’ organizations and cooperatives.

percent by 2015 (Knoepfel, cited in GRAIN 2011). Globally, the most important pension funds are government pension funds, with those of Japan, Norway, the Netherlands, Korea, and the United States being the most important in terms of their assets (P&I, cited in GRAIN 2011).<sup>15</sup>

### ***Investment banks***

Investment banks and private equity funds are key actors in land purchases. In 2008, the United Kingdom-based Emergent Asset Management announced its intention to raise US\$450 million to US\$750 million to invest in farmland in Sub-Saharan Africa. Cru Investment Management, another UK-based investment company, has already piloted a farming scheme in Malawi and has launched another fund, called Africa Invest (Borger 2008 as cited in Mhlanga 2010). Such investments were also attracted by the increasing rate of return in agriculture, backed by rising agricultural commodity prices or speculative investments based on land values.

### ***Sovereign wealth funds***

Sovereign wealth funds refer to state-owned investment funds that hold or manage public assets for financial objectives. In recent years, these sovereign wealth funds seem to have been less and less directly involved in investments. Increasingly, **governments prefer to support investments that are made by national business** (their “home companies”) rather than investing directly into agricultural land in developing countries. According to the FAO (2013a), this is attributable to a strategy of risk reduction – not only financial risks, but also reputational risks in the wake of negative media coverage relating to land grabs. This support, in most instances, takes the form of **PPPs**, whereby the government provides or **guarantees loans, as well as tax rebates or technical assistance** (FAO 2013a). This increasing role of partnerships sponsored by national governments plays a tremendous role in the penetration of Africa’s agro-food sector by private multinationals (section 4).

### ***Hedge funds***

Investments in hedge funds are pooled and professionally managed. But unlike other mutual funds, the funds offer **more flexibility in terms of their investment (and exit) strategies**. Hedge funds are usually vehicles used by a financial elite; they adopt **aggressive strategies with high levels of speculation** that fall outside conventional regulatory constraints. Miller et al. (2010) mention one hedge fund operating in Africa: the Emergent African Land Fund, which offers investors the opportunity to invest in farmland in Sub-Saharan Africa. The fund targets “purely private sector initiatives with a targeted capital base of USD 2.7 billion.”

### ***Development finance institutions***

Development finance institutions (DFIs) are defined as “government-funded investment corporations that combine the broad development objectives of traditional multilateral aid agencies with the commercial approach taken by private-sector banks and investors” (GIIN 2015, ch. 4), which implies that DFIs are strongly influenced by national development agendas (Kingombe, Massa & te Velde 2011). These have been described as the “for-profit cousins of national development aid agencies” (GRAIN 2016). If DFIs are funded in most part by governments, some also raise capital

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<sup>15</sup> Most of these pension funds tend to invest in OECD countries, Asia, and Latin America. A 2012 review (GRAIN 2012) of these funds counted a total of 30 pension funds investing in agriculture worldwide, with only 2 explicitly investing in Africa. This doesn’t necessarily mean these pension funds are not investing on the continent. Pension funds which invest in Africa include, for instance, the CPPIB (Canadian Pension Plan Investment Board) and the Pensionskassernes Administration (PKA), a Danish public pension fund with a total of US\$25 billion under asset management (AUM), of which 1.5% has been invested in farmland. The fund has committed US\$47.9 million to SilverStreet Capital’s Silverland Fund, a specialized 10-year fund engaged in farmland investment in Africa, for expected returns of 15–20%. Industry experts estimate that farmland investments account for less than 0.1% of the portfolio of European pension funds involved in the business (Pensions & Investments 2010).



from conventional investors (GIIN 2015). The type of finance that DFIs provide is typically **long-term finance** (Daniel 2012). As they are often expected to sustain their operations and growth from their investment returns, with limited future capital injections, DFIs focus on **low-risk financial investments**, while ensuring that the projects they invest in have positive **social or environmental impacts** (GIIN 2015). The investments they make take the form of “... any combination of equity, debt, or guarantees” (GIIN 2015:4). In East Africa, the bulk of DFI capital is direct debt or equity investments into enterprises, and public-private partnerships (GIIN 2015).

DFIs can be national or regional or multinational. Among the DFIs operating in East Africa, national ones, for instance, include Norfund, or the Commonwealth Development Corporation (CDC), UK’s DFI that has been operating in Eastern Africa since 1948. Regional DFIs include the African Development Bank (ADB) (founded in 1964), the East African Development Bank (EADB) (1967), and the Preferential Trade Area (PTA) Bank, established by the Common Market for Eastern and Southern Africa in 1985 (PTA Bank 2015). The EADB (2015), for instance, pledged financial support to various businesses in the region in the form of loans (rose, tea, or sugar export businesses in Uganda; banana business in Tanzania). Multilateral DFIs include, for instance, the World Bank’s International Finance Corporation (IFC), present in the region since the 1960s.

The involvement of DFIs has played a significant part in **the increase of financial flows in African agriculture, as DFIs are often shareholders of funds set for this sector**. These DFIs not only bring more capital, but also ease the flow of private capital into the continent through so-called innovative financial mechanisms; these include **deferred profitability or securing instruments** (Ducastel & Anseeuw 2014). Illustrations of these instruments include the **World Bank’s Master contract guarantee** and **Multilateral Investment Guarantee Agency (MIGA)**. MIGA “provides contracts that guarantee foreign direct investment against a number of risks, thereby enabling fund managers to attract funds from investors who want to insure themselves against non-commercial (i.e., political) risks” (Isakson 2014:722). MIGA, for example, played a critical role in easing the flow of FDIs in Uganda by providing US\$3.11 million coverage to Afriproduce Limited for its investment in a coffee-processing facility (Mhlanga 2010). Similarly, the Bank’s **International Finance Corporation (IFC)** has backed a number of private equity funds that invest in agriculture, and supports networking among institutional investors (Isakson 2014:722).

### *Private investors*

This category of investors includes **wealthy individuals, corporate entities, investment houses, and foundations**. Sourcing information on the involvement and influence of such private investors in East Africa is challenging, as there is little literature available on the topic, but some consideration is given to domestic investors. The most readily available information otherwise pertains to private foundations; here, the fundamental role that the Bill and Melinda Gates Foundation (BMGF) plays in Africa’s agricultural sector stands out. Partnerships are dealt with as a distinct set of actors, as their role in the shaping of the food sector in Africa is pre-eminent.

### ***Domestic investors and national elites***

African actors have not been passively enduring agribusiness and land investment flows on their continent. Ducastel and Anseeuw (2014) point to the myriad African financial service providers, “from rating agencies to portfolio managers, [which] have been established with the aim to support these expected financial flows.”

In a similar fashion, **national elites** figure pre-eminently in land acquisition in the African landscape. In several countries, research has established that relatively wealthy individuals (both rural and urban) are investing in land at an unprecedented rate, leading to the rapid rise of medium-scale

farmers in Africa. Cotula et al (2009) report that in Ethiopia, domestic investors account for over 60 percent of the land area acquired in the period of 2004 to 2009. A study of three countries (Ghana, Kenya, and Zambia) indicates that **medium-scale farms control more land than large-scale foreign investors** in all three cases (Jayne et al. 2014a). The **diaspora** – local nationals living overseas – is also a player in land acquisitions. Land contracts published by the government of Ethiopia in May 2011 (for a total of 350,099 hectares) included six leases involving the diaspora out of a total of 23, although the aggregate land area acquired by international migrants was small (less than 5% of the total) (Cotula 2012).

### **Foundations**

The most important and influential foundation present in (East) Africa's agricultural sector is the **BMGF**. The foundation, possibly the biggest philanthropic organization in the world, with a US\$40 billion endowment, originally focused its support on health and education. **A shift towards (African) agriculture was taken in 2006–07**, as the foundation co-launched the Alliance for a Green Revolution in Africa (AGRA) with the Rockefeller Foundation and allocated significant funding to the international agricultural research system (CGIAR) (GRAIN 2014). The BMGF portrays itself as one of the **world's major donors to agricultural research and development**,<sup>16</sup> and indeed most of the agricultural grants focus on Africa (GRAIN 2014). The extent to which funding allocations effectively benefit local/African entities and local agricultural resilience has been brought under severe scrutiny by GRAIN (2014), which uncovered that among the organizations directly receiving agricultural grants by the BMGF, 80 percent were North American and European institutions, and only 10 percent were African. GRAIN (2014) also disputes the philanthropic status of the BMGF, as media reports have over the past few years documented the profit-driven approach adopted by the foundation.<sup>17</sup> Other important foundations in this sector include the Soros Economic Development Fund, the MasterCard Foundation, and the Gatsby Charitable Foundation, all of which, as we will see, are involved in the funding of AGRA.

### **Box 2.: Controversy in the role played by Scandinavian and religious entities as investors in Mozambique's forestry sector**

The Global Solidarity Forest Fund (GSFF), an "ethical investment fund" based in Sweden, was actively involved in Mozambique with the backing of endowment and pension funds. Since 2006, the fund had invested in four companies in the country, including Tectona Forest of Zambezia. The GSFF was granted DUAT in the Niassa and Zambezia provinces for a period of 49 years.

Among investors in the GSFF were the Norwegian Lutheran Church Endowment Fund (OVF), which counts the Diocese of Västerås Lutheran Church of Sweden and the Donation of the Norwegian Lutheran Church. ABP, the Dutch pension fund for government employees, education and public sector workers, has also invested in the GSFF in search of potential financial returns (UNAC & Justiça Ambiental 2011) and is now the main investor (Oakland Institute 2011).

In 2011, the GSFF ran into serious conflicts with communities because of poor working conditions and the way land was appropriated – often without proper community consultation and with occupation spanning beyond the originally agreed perimeter assigned to the plantation. A 2010 investigation commissioned by the Mozambican Government condemned Chikweti Forests of Niassa, a company owned by GSFF. The findings were so damning that it led to a change of management of GSFF (Oakland Institute 2011).

<sup>16</sup> An analysis of the agricultural projects funded by the BMGF can be found at <http://www.gatesfoundation.org/How-We-Work/Quick-Links/GrantsDatabase#q/k=agriculture&issue=Agricultural%20Development&region=Sub-Saharan%20Africa&page=2>

<sup>17</sup> For a fascinating discussion on this topic, see GRAIN: <https://www.grain.org/article/entries/5064-how-does-the-gates-foundation-spend-its-money-to-feed-the-world>.

In 2014, Green Resources (GR) acquired GSFF, including all its Mozambican assets and additional cash, in return for issuing US\$17.8 million new shares (Green Resources 2014). This combined company thus became the largest African forest plantation (or “forestation,” to use its own term) company outside of South Africa, with more than 45,000 hectares of standing forest in Mozambique, Tanzania, and Uganda (Green Resources 2015).

### *International agricultural partnerships*

This last category includes large PPPs that are not strictly classified as agents of financialization of the agricultural sector, but rather as agents of the commodification of Africa’s agriculture. In other words, this report argues that the public-funding allocations made through these large partnerships go a long way in supporting the private investments made by agribusiness actors to penetrate African markets, under the guise of development. The partnerships under consideration here are the Alliance for a Green Revolution in Africa (AGRA), the G8’s New Alliance for Food Security and Nutrition (G8NAFSN), Grow Africa, and the African Fertilizer and Agribusiness Partnership (AFAP).

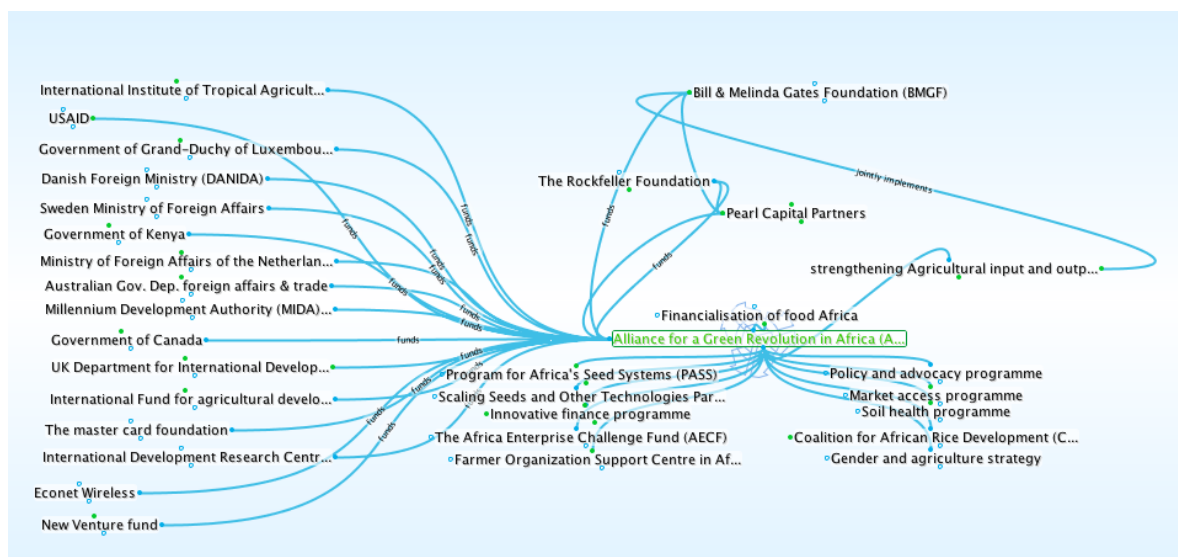
What these partnerships have in common is that they are all funded by financial flows originating from industrial nations, and they all focus on supporting a Green Revolution for Africa, partly through public funding. The Green Revolution heavily rests on easing the involvement of multinational corporations in developing countries, the expansion of which is spurred by the need to secure new markets.<sup>18</sup> This expansion is inherently driven by **financialization and globalization, as the majority of small-scale farmers in Africa will require some form of credit** to purchase expensive inputs, such as certified seed and fertilizers (ACB 2015b). Therefore, large partnerships capitalize on the current investment climate towards the continent and the sub-region, easing the way for these entities to **capture supply chains**. The report further contends that many agro-businesses have thus bought into the value chain rhetoric as an engine to advance food security; but de facto this approach allows them to enter the most profitable side of the value chain, as extensively demonstrated by several analyses (ACB 2015d).

#### ***The Alliance for a Green Revolution in Africa (AGRA)***

AGRA was co-launched by the BMGF and the Rockefeller Foundation in 2006; it has since received US\$414 million from the BMGF (GRAIN 2014). Since then, the partnership has grown significantly and is receiving financial support from many national and multilateral funds, as illustrated in Figure 1. According to the programme’s evaluation report, AGRA has, since its inception, invested about 44 percent of its resources (US\$168.5 million) in four breadbasket countries: Ghana, Mali, Mozambique, and Tanzania (AGRA 2014). Between 2006 and 2010, AGRA received \$316 million from BMGF and \$67 million from Rockefeller, and since then has received another \$150 million from BMGF.

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<sup>18</sup> However, pan-African and regional bodies are not left wanting when it comes to actively promoting the Green Revolution approach to Africa. The African Union, under the Abuja Declaration on Fertilisers of 2006, has called for fertilizer use across the continent to increase from 8kg/ha to 50kg/ha by 2015 (ACB 2014). NEPAD’s Comprehensive Africa Agriculture Development Programme (CAADP) calls for 10% of national budgets to be allocated to agriculture, with a particular focus on promoting the use of improved technologies—such as seed and fertilizer (ACB 2015).



**Figure 1. Organigram of AGRA, showing links between funders, other actors, and programmes.**

AGRA supports 11 programmes, with a very strong focus on the seed segment of the agro-value chain. Over the programme's eight-year reporting period, it reports reaching 15.3 million smallholder farmers in 16 African countries. They benefited from improved seeds produced by AGRA-supported seed companies, with a total estimated 343,242 MT of improved seed having been produced and sold by AGRA-supported companies. In terms of outputs, the programme reports that a total of 501 new varieties have been released in 14 countries, and 1,339,030 MT of inorganic fertilizer sold by AGRA-supported agro-dealers (AGRA 2014). The programme is depicted by GRAIN (2014) as focusing essentially on supporting the emergence of private markets for seeds and fertilizers and on shaping policy (GRAIN 2014).

### Box 3.: AGRA in Mozambique

AGRA has explicitly opted to embrace the Green Revolution paradigm for the development of its agricultural sector. The country resolutely aims to achieve food security through modernization and enhanced commercialization of crops, which includes using and scaling up Green Revolution technologies such as synthetic fertilizer/herbicides/pesticides, certified seed, irrigation, and access to credit (ACB 2015c). From 2007 to 2012, total AGRA grants in Mozambique came to US\$12.6 million, with the biggest allocations during that period made to the Programme for Africa's Seed Systems (PASS), with 40.5 percent of total value of grants, and the Soil Health Programme (SHP), with 33.3 percent. Forty-five percent of AGRA grants in this period went to three recipients: Instituto de Investigação Agrária de Moçambique (IIAM, the national agricultural research institute); the International Fertiliser Development Centre (IFDC); and the Agência de Desenvolvimento Económico da Província de Manica (ADEM, the Manica Economic Development Agency) (ACB 2015c). Mozambique's signing up to the G8NAFSN and to Africa Growth and AFAP (see below) also falls under the Green Revolution paradigm (see below).

### The G8's New Alliance for Food Security and Nutrition (G8NAFSN)

The G8's New Alliance partnership was proposed by the US government and signed by some 40 states, international financial institutions, and multilateral organizations at the 2009 G8 Summit in L'Aquila, Italy. To date, the G8NAFSN has launched programmes in 10 countries: Tanzania, Nigeria, Mozambique, Malawi, Ghana, Ethiopia, Ivory Coast, Burkina Faso, Benin, and Senegal. The G8NAFSN (2014) claims that this initiative will lift 50 million Africans, including 3.1 million Mozambicans, out of poverty by 2022.

Eleven private-sector partners have operations or stated intentions to invest in more than two countries. Among these private-sector partners are some of the largest corporate giants of the food

and agriculture industries or their service providers.<sup>19</sup> G8 countries function as brokers between commitments by host governments and investment pledges by the private sector. These commitments are captured in Letters of Intent (LOI). Cooperation Framework Agreements (CFAs), drawn up for each participating country, spell out the country's commitments against a set of predefined policy or market intervention commitments. As in the case of AGRA, the G8NA's efforts essentially tend to strengthen business opportunities of companies from certain countries, and thereby profit those national economies (Obenland 2014).

**Box 4.: The G8 New Alliance for Food and Nutrition in Mozambique**

Mozambique joined the New Alliance in 2012 (G8NA n.d.). The main funders in Mozambique are the US and Japan, with the UK, European Union, and Italy also acting as financial backers. Under the New Alliance, a framework agreement was signed with Mozambique and translated into a national public policy, the National Agricultural Investment Plan (PNISA), which has become the blueprint for agricultural development in Mozambique. The PNISA has allegedly subverted the country's agriculture objectives outlined in the Strategy Plan for the Development of the Agricultural Sector (PEDSA) to serve the economic interests of the G8 Alliance under the guise of enhanced food security and nutrition (Vunhanhe & Adriano 2014, cited in GRAIN 2015).

According to the New Alliance (2014), to date a total of 20 LOIs referencing US\$173 million in private-sector commitments have been issued, out of which US\$91 million in investments had been made by 2013. This represents 225,000 smallholders being reached through LOIs in 2013, and 1,430 jobs created through LOIs in 2013.

The Framework Agreement that the Mozambican government entered into<sup>20</sup> makes provision, inter alia, for reforms relating to land laws, allowing more flexible allocations of land use rights (DUATs) to accelerate and ease the penetration of foreign investments and reforms aimed at "improving incentives for the private sector especially in developing and implementing domestic input and seed policies that encourage increased private sector involvement" (G8NA n.d.). This later reform of the national seed policy notably includes "a) Systematically ceas[ing] distribution of free and unimproved seeds except for preidentified staple crops in emergency situations. b) Allow[ing] for private-sector accreditation for inspection. 2. Implement[ing] approved regulations governing seed proprietary laws, which promote private sector investment in seed production (basic and certified seed). Under this framework, the country's seed and fertilizer laws are also reformed to harmonize them with the Southern African Development Community (SADC)'s seed protocol requirements, a strategy preferred by multinational corporations to penetrate national markets (ACB 2015a). By 2014, this new legislation on the regulation of production, trade, quality, and certification of seed had been passed (G8NA 2014).

A critical building block of the G8NA content is the Scaling Up Nutrition initiative, which comprises governments, UN organizations, civil society organizations, transnational corporations, and researchers. Scaling Up Nutrition is supported by a Multi-Partner Trust Fund that provides resources for projects at the country level. The fund has received contributions from DFID, Irish Aid, and the Swiss Agency for Development (Obenland 2014). The Special Rapporteur on the Right to Food, De Schutter, has called for an explicit alignment of its initiatives with human rights, including the right to food (2014).

<sup>19</sup> For a critical analysis of the G8NAFSN, see Obenland (2014), "Corporate influence through the G8 New Alliance for Food Security and Nutrition in Africa," <https://www.globalpolicy.org/component/content/article/270-general/52676-corporate-influence-through-the-g8-new-alliance-for-food-security-and-nutrition-in-africa.html>

<sup>20</sup> See <http://www.new-alliance.org/resource/mozambique-new-alliance-cooperation-framework>.

### ***Grow Africa***

In 2010, the **World Economic Forum** (WEF) put forward its **New Vision for Agriculture**. The initiative is led by 17 global companies<sup>21</sup> that are industry partners and has the ambition to “harness the power of agriculture to drive food security, environmental sustainability and economic opportunity” (WEF 2010). It aims to achieve this goal by increasing production by 20 percent (thanks to a new generation of agricultural initiatives), while decreasing emissions by 20 percent and reducing the prevalence of rural poverty by 20 percent every decade.

One of the partnerships that has emerged from the New Vision for Agriculture is Grow Africa. The **Grow Africa partnership is important because it serves as the rallying point for private actors in the G8NAFSN**. The partnership is co-convened by the African Union Commission (AUC), the New Partnership for Africa’s Development (NEPAD), and the WEF.

The pledges and activities of the G8NAFSN in the private sector are coordinated by the Grow Africa partnership, which also provides the monitoring mechanism for private pledges (Obenland 2014). Grow Africa’s role is to drive investment commitments and ensure that the intention and domestic private (mostly agri-business companies) “execute [the] committed investments, currently totalling US\$10 billion from over 200 companies” (Grow Africa 2014). Beyond its activities in the G8NAFSN, Grow Africa has set three goals for itself: increasing private-sector investments in African agriculture; enabling multi-stakeholder partnerships; and expanding the knowledge of best practices and existing initiatives (Grow Africa 2014). Currently, Grow Africa is promoting initiatives in 12 Comprehensive Africa Agriculture Development Programme (CAADP)<sup>22</sup> countries. **Agricultural Growth Corridors** in Mozambique, which also play a prominent role in the G8NA, are probably the most prominent projects promoted by Grow Africa (see section 2.2).

### ***The African Fertilizer and Agribusiness Partnership (AFAP)***

AFAP, a non-profit organization, was established in 2011 in collaboration with the New Partnership for Africa’s Development (NEPAD), the ADB, the International Fertilizer Development Company, and the Agricultural Markets Development Trust. The organization was initially funded with a US\$25 million grant from AGRA, the largest single grant given by AGRA to date (ACB 2015a). Several key industry players overtly fund the partnership. The OCP Group, the world’s largest exporter of phosphate rock and phosphoric acid, as well as one of the world’s largest producers of fertilizer (OCP 2016), is featured as sharing the status of AFAP’s platinum sponsor, together with AGRA.

This strategic partnership plays a critical role in **stepping up fertilizer usage in West Africa and in South and East Africa** by increasing the private sector’s presence in the continent (through PPPs) and by shaping policy. AFAP operates through the means of **Agribusiness Partnership Contracts (APC)**, defined as an “agreement between an agribusiness and AFAP that provides AFAP assistance in return for substantive market development contributions”; the partnership aims at issuing 500 APCs (AFAP 2015). Among the 35 APCs signed by AFAP so far are deals with Louis Dreyfus Commodities, one of the world’s largest grain traders, and International Raw Materials (IRM), a US-based multinational fertilizer trading company (ACB 2015a).

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<sup>21</sup> These companies are as follows: Archer Daniels Midland, BASF, Bunge, Cargill, Coca-Cola, DuPont, General Mills, Kraft Foods, Metro, Monsanto, Nestlé, PepsiCo, SABMiller, Syngenta, Unilever, Wal-Mart Stores, and Yara International. As Paul & Steibtrecher (2013) put it, these are old names for a new vision.

<sup>22</sup> CAADP was launched in 2003 by NEPAD to set out a policy framework for “agricultural transformation, wealth creation, food security and nutrition, economic growth and prosperity for all.” CAADP clearly advocates a Green Revolution approach to agriculture in Africa backed by PPPs.

AFAP offers a good illustration of the above-mentioned **focus on value chain development and penetration** by such partnerships as an entry point to the privatization of this input sector: its stated mission entails “strengthening of medium-scale fertilizer and agribusiness enterprises that provide an alternative to traditional subsidy programs” (AFAP 2015). The programme aims to **double fertilizer consumption** in its core target countries, namely Ghana, Mozambique, and Tanzania, and to increase the number of fertilizer users by 15 percent (ACB 2014). This partnership programme is also very much piggybacking on the financialization of the food sector in Africa. AFAP is essentially funded by development funds: notably, the United States Agency for International Development (USAID), the United Kingdom’s Department of International Development (DfID), the Food and Agriculture Organization (FAO), the Soros Foundation, the Sustainable Trade Initiative of the Netherlands, and Ethiopia’s Agricultural Transformation Agency. According to the African Centre for Biodiversity (ACB), these “development funds [are used] to subsidize both the multinational fertilizer companies who dominate the African fertilizer trade, and the large multinational banks who are lining up to extend ... risk-free credit to small-scale farmers” (2014). As such, AFAP finds itself at the **heart of the global partnership nexus, pushing for the Green Revolution countries**. Its target countries are also coveted by all the other afore-mentioned PPPs, to which USAID’s Feed the Future initiative can be added (ACB 2014).

By 2013, AFAP had invested about US\$5.2 million with seven fertilizer companies and had signed 35 agribusiness contracts. These contracts took the form of various financial instruments, with 16 of them being guaranteed credit facilities and 19 being matching grants. The funds have essentially been invested into building warehouse capacity (ACB 2015a).

## 2.2 Partnerships’ channels of influence in East Africa

These PPPs have fallen under harsh criticism by analysts who denounce how, under the guise of promoting agricultural development, they in fact are playing a part in **reshaping the agricultural value chains** in their target countries through “**coercive innovations**” (Thompson 2014), notably when it comes to the seed sector and by favouring the entry of corporate cartels (seed, pesticides, fertilizers, and food manufacturing) into these countries. Obenland (2014) makes a strong case about the corporatization of the food sector under the impulse of these various global partnerships, whose operations are intertwined and have overlapping areas of influence. He underlines how the G8NAFSN, which brings no innovation per se in terms of the private sector’s involvement in the agricultural systems of these countries, has been playing a part in **shifting voluntary mechanisms into binding regulatory measures that resolutely make them more permeable to transnational corporate interests**. This is especially true for the seed and nutrition policies of countries that fall under the aegis of the G8NAFSN.

In exploring the role and channels of influence in East Africa, we will mostly focus on PPPs. These garner influence by their very nature: they focus on nurturing links between public actors (development agencies) and private actors (corporations) to serve a specific agenda. DFIs are very much associated with private ventures under the common umbrella of AGRA, as shown by the extensive involvement of several sovereign funds/development agencies in support of AGRA (see Figure 1 above). It can be argued that the involvement of development agencies is a prerequisite to pave the way for corporations by creating markets, as this can prove to be a costly venture.

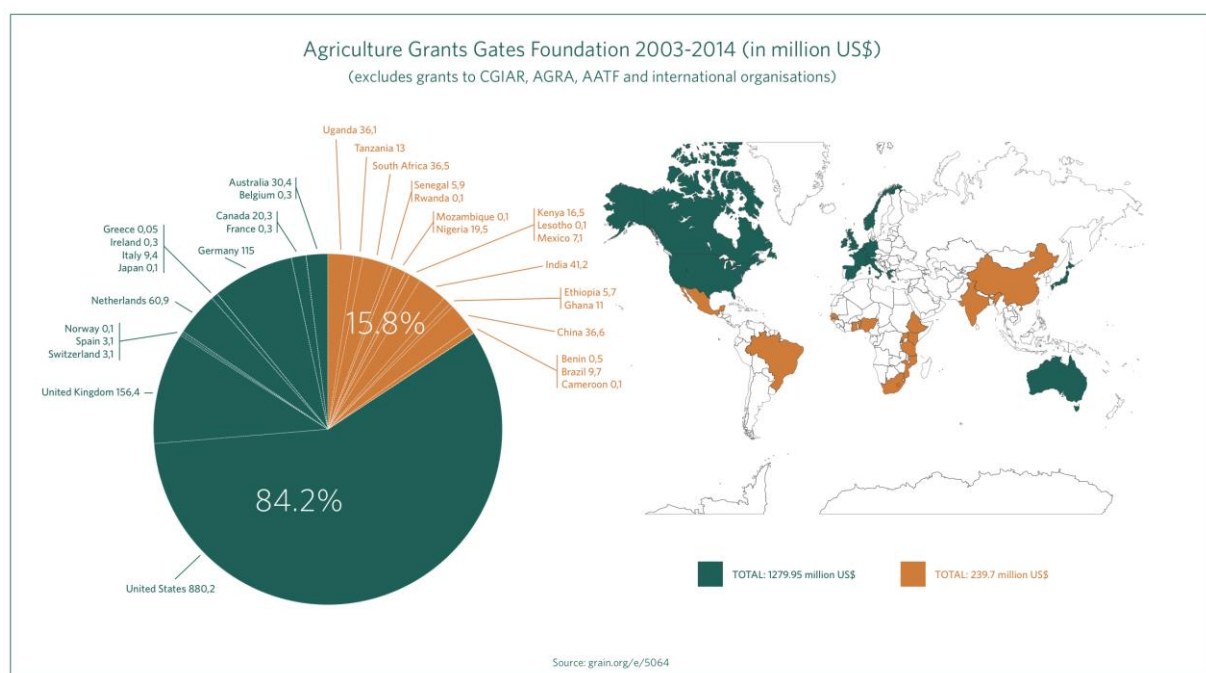
Looking more closely at how these partnerships operate, we argue that they serve their agenda by first putting forward their domestic economic interests (supporting private-sector involvement into agro-businesses), and second by shaping policy and pushing for the transfer of technologies developed in industrial countries.



## AGRA: Allocating funds to the global North to advance African agriculture?

An important body of literature illustrates how these partnerships are easing the entry of private seed and fertilizer multinationals into Africa's food value chain, a practice some decried as "philanthrocapitalism" (Thompson 2014). According to the programme's evaluation report, AGRA has, since its inception, invested about 44 percent of its resources (US\$168.5 million) in four breadbasket countries: Ghana, Mali, Mozambique, and Tanzania (AGRA 2015). This information is belied by the findings reported in a recent report compiled by GRAIN (2014), which combed through all the grants for agriculture that the Gates Foundation gave between 2003 and 2014. The report finds that AGRA received only a fraction of BMGF's total spending on agricultural development, with North American and European institutions receiving 80 percent of funds allocated to organizations, and African institutions only 10 percent. This led GRAIN to conclude that "the Gates Foundation fights hunger in the South by giving money to the North" (2014:2) (see Figure 2).

East Africa is one of the hotspot world regions on which AGRA has been concentrating its so-called philanthropic efforts. Between 2003 and 2014, Tanzania received the lion's share of the close to US\$240 million AGRA grants allocated to developing countries (36.1%), but Mozambique received only 0.1 percent (see Figure 2).



**Figure 2. Agricultural grants allocated by the Gates Foundation (2003–2014).**

**Source: GRAIN 2015.**

Another report by GRAIN (2015), titled *The Exxons of Agriculture*, makes important revelations concerning the channels of influence of multinational corporations (MNCs) within these PPPs. For instance, Yara, one of the world's largest fertilizer companies, which is over 40-percent owned by the Norwegian government and its state pension fund, is particularly active within the WEF as co-chair of its New Vision for Agriculture with Walmart. Yara also chairs the WEF's Climate Smart Agriculture working group<sup>23</sup> through which it ironically coordinates the implementation of so-called

<sup>23</sup> The Global Alliance for Climate Smart Agriculture was launched in 2014 at the United Nations (UN) Summit on Climate Change in New York (GRAIN 2015).



climate smart fertilizer programmes with Nestlé, PepsiCo, Syngenta, and other companies in Asia and Africa.<sup>24</sup>

### *Promoting commercial agriculture through the development of Agricultural Growth Corridors*

A critical initiative designed to advance the private sector's involvement in Africa's agricultural sector are African Agricultural Growth Corridors, a concept that first emerged at the WEF and that forms part of its proposed New Vision for Agriculture. The G8, the G20, the World Bank, and the FAO also support this corridor initiative. These corridors are "designed to facilitate the conversion of millions of hectares of land to industrial agriculture, to be served by building infrastructure (roads, railway, irrigation, storage, processing and ports) and led by private companies" (Paul & Steinbrecher 2013:1). Although the focus is primarily on agriculture, mining (coal/minerals) and the forestry sector are also targeted. They are especially being developed in Mozambique (and in Tanzania) at this stage, with the overt intention of **bolstering commercial investment in the agricultural sector** of these countries. The Government of Mozambique is investing in infrastructure and capacity development to make the corridors more attractive for investors, with all actors earmarked to benefit from the gained economies of scale (Obenland 2014).

Although the emphasis in the development of these corridors is on how they are critical to the commercialization of small-scale agriculture, **the effective benefits accruing to small-scale farmers has come under severe scrutiny**, as these developments clearly tend to **focus on commodities** for international markets rather than advancing local food security and sovereignty (Paul & Steinbrecher 2013; ACB 2015c; ACB 2015d; UNAC & GRAIN 2015).

Of the six development corridors earmarked in Mozambique's strategic investment plan, the three most important corridors under development in Mozambique are the **Beira corridor** (BAGC),<sup>25</sup> the **Nacala corridor** (see Box 5), and the **Zambezi Valley corridor**. Mozambique's G8NAFSN CFA gives a clear picture of these agricultural growth corridors, which have a regional importance, as several African countries use them. Large-scale land investments in Mozambique have essentially taken place in the proximity of transport nodes, and especially tarred road and railway tracks (UNAC & Justiça Ambiental 2011). Matanuska Mocambique Limitada, for instance, underscores the strategic location of its banana business, 100 kilometres from the deep-sea port of Nacala, with "excellent road and port infrastructure allow[ing] for efficient logistics enabling weekly shipments to the Middle East and Europe" (Rift Valley 2015). The Manica Province is located on the Beira Corridor, and its proximity to Zimbabwe has prompted interest from foreign commercial agriculture. Local research indicated that approved land leases in the province increased from 562 hectares in 2007 to 58,880 hectares in 2009, while applications for 367,165 hectares were pending as of January 2010 (Kaarhus 2011). Recent developments confirm this trend towards large land deals being brokered with foreign investors, with the collusion of the Mozambican government (GRAIN 2015).

#### **Box 5.: The Nacala corridor: land grabs for agribusiness ventures**

##### **The ProSavana project: land grabs for agribusiness ventures**

A large agri-business investment that has been shrouded in controversy and about which very limited public information is available is the ProSavana project. Planning for this large multinational project was reportedly initiated in secrecy in 2009, with the Government of Mozambique negotiating with foreign governments and

<sup>24</sup> Yara also drove the emergence of the African agricultural growth corridors within the WEF (see below).

<sup>25</sup> In Beira, supporters include DuPont, Vale, and Rio Tinto, several banks, and companies with interests in sugar and biofuels (Paul & Steinbrecher 2013).

donors – namely, Japan and Brazil, through their respective cooperation agencies, the Brazilian Cooperation Agency (ABC) and the Japan International Cooperation Agency (JICA).

The original ProSavana master plan makes provision for a total of 38 million hectares of land to be devoted to agribusiness in the Nacala corridor, in the Northern part of the country (Wise 2014).<sup>26</sup> Other (more modest) figures mention 14 million hectares of land or even 10 million hectares (FGV Projetos 2014; UNAC & GRAIN 2015).<sup>27</sup> Although its promoters profile ProSavana as a “new model of sustainable agriculture” that will lead to food security, poverty reduction (through job creation and income generation for local communities) and the preservation of wildlife and the environment “while fomenting synergies between local small, medium and large scale farmers” (FGV Projetos n. d.:20), critics contend that the project threatens the land and agricultural practices of peasant farmers serving local markets, for the benefit of “massive farming operations run by foreign companies to produce cheap agricultural commodities” (UNAC & GRAIN 2015).<sup>28</sup>

ProSavana is modelled on the “ProDecer” project in the Mato Grosso province and Brazil’s successful exploitation of its own savannah – known as the cerrado – where soya plantations were developed in the 1970s.<sup>29</sup> The Brazilian-based company FGV Projetos designed the project’s master plan,<sup>30</sup> which makes provision for the production of sugar cane, maize and soya for export mainly to Japan.<sup>31</sup>

FGV Projetos (n.d.) has also set up a ten-year private equity fund, known as the Africa Opportunities Fund: Nacala corridor fund, which was opened in 2013. In its promotional brochure about the fund, the firm offers investors colossal projected internal rates of returns of 20 percent per annum (FGV Projetos n.d:35). The provision of financial opportunities to prospective investors, combined with prospects for astronomical returns, illustrate the financialization phenomenon underway in the country.

It was only in March 2013 that local constituencies became acquainted with the (leaked) ProSavana master plan (GRAIN 2013). This plan was met by vehement opposition by local communities and organizations, which the ProSavana Directorate attempted to assuage through a “quick implementation programme” (Ribeiro 2016, personal conversation).<sup>32</sup> This ‘softer’ version of the project consisted of a private investor receiving funding to initiate the planting of food crops for the benefit of the local population (Ribeiro 2016, personal conversation). By then a new concept note of this ‘development-friendly ProSavana’ had been issued (Wise 2014). The aforementioned scheme only created more frustration, as contractors reneged on the original price agreed to buy the local crop produced (onions in this case). The strong opposition put up by civil society forced the postponement of the second phase of ProSavana and led to the organization of public hearings with the affected communities in April-June 2015 (No to ProSavana 2016).

However, these still failed to meet the requirements of free, prior and informed consent, according to a statement made by the No to ProSavana movement (No to ProSavana 2016). This movement, instigated by the National Union of Peasants (UNAC), consists of a consortium of grassroots organizations, which coalesced to halt ProSavana (Lemos 2016). They denounce both the lack of transparency and lack of community participation in this project, and condemn the ProSavana master plan for undermining “peasant productive systems and pluri-active livelihoods” (No to ProSavana 2016:2), partly because of the resettlement and

<sup>26</sup> See <http://www.prosavana.gov.mz/portfolio-items/disclosure-of-the-master-plan-draft-zero/>.

<sup>27</sup> These later figures might be the result of the watered down version of the master plan.

<sup>28</sup> See <http://otherworldsarepossible.org/mozambiques-movement-end-land-grabs>.

<sup>29</sup> ProDecer stands for PRO Desenvolvimento dos Cerrados.

<sup>30</sup> See [http://www.prosavana.com/index.php?num\\_lang=2](http://www.prosavana.com/index.php?num_lang=2).

<sup>31</sup> The other crops featured in the master plan include flexi-crops such as African palm, sugarcane, cotton; food crops such as beans, sunflower, rice, castor beans, cassava and peanut; elephant grass for animal feed; and energy crops such as *jatropha*; and eucalyptus.

<sup>32</sup> On the occasion of the official launch of ProSavana, and during which a public hearing was held, local organizations ORAN and UNAC screened a short movie showing the impacts of the ProDecer programme in Mato Grosso. Footage of spoilt land and contaminated water, as well as health consequences associated with the spraying of crops and overt community frustration caused significant damage to the positive spin project promoters were attempting to put on ProSavana. This movie can be viewed on: <https://www.youtube.com/watch?v=jUKmyKf5E0k>.

alienation from land the project entails, combined with the prospective massive arrival of Brazilian farmers in the corridor.

But the demise of ProSavana is, according to some analysts, not only attributable to the strong resistance met at a grassroots level (with international support). It also has to do with the erroneous assumptions made in the project design. Prosavana was premised on the idea that the Nacala region and the Mato Grosso cerrado shared similar agro-ecological properties. However, the cerrado has notoriously poor soils (and consequently a sparse farming population); it was easy to remedy the first issue through conventional inputs to farm soya and the second by displacing small groups of populations (under the then military regime). In Nacala the land is endowed with fertile soils and is therefore densely populated. Another parameter that surprised and certainly put off prospective investors is the fact that Mozambican land tenure regime protects people's rights. Communities are given possession over lands that they have farmed for over 10 years. Wise (2014) explains that the expectations of Brazilian farmers to purchase vast tracks of unpopulated land were quickly dispelled and this certainly contributed to dampen the project and to drive its rethinking.

However it is important to underline that the Mozambican government has been accused of colluding with these foreign investors to provide them with long-term leases, including in the Nampula Province. UMAC & GRAIN (2015) for instance report on the case of the Mozambique Agricultural Corporation (Mozaco), established in Mozambique in June 2013 by Rioforte Investments and João Ferreira dos Santos (JFS Holding) which was granted over 2,000 hectares of land in the Malema District. By the end of the year the company had allegedly evicted 1,500 farmers to make way for their operations, with several thousand more farmers threatened with eviction should the company be allowed to expand its farming operations to 20,000 hectares (ADECRU as cited by UNAC & GRAIN 2015:6).

At this stage the reports on the ground indicate that the programme has been halted. The government of Mozambique is allegedly reconsidering its programmatic approach, involving civil society organizations and conducting community consultations to design a new master plan (Ribeiro 2016). Field research conducted for this study also revealed several cases of land having been transferred to foreign investors in the vicinity of Maputo without any adequate community participation. One case that was investigated involved a community, whose informal leader was made to sign a title deed transfer for the benefit of a South African farmer, on behalf of all farmers (Associação de camponeses Mawocha homu 1). The farmer in question had made the illiterate woman sign the transfer without any further involvement of the community and three years later started 'farming' the communities' land, starting with ripping out their crops. Under this title deed transfer he was given the right to farm 30 hectares of land for 15 years for the price of 60.000 Meticaís. Local authorities have reportedly not done anything to support this community, because of the title deed having been signed (Tendis & Mentz-Lagrange 2016).

### **The Lúrio River project**

Although apparently not related to ProSavana, another large-scale project is in the pipelines in the same region: the Lúrio River project that was announced by the government in January 2014 with the same non-consultative approach (Wise 2014). The large farm project along the Lúrio River (overriding the Niassa, Nampula, and Cabo Delgado provinces) is jointly managed by the local Companhia de Desenvolvimento do Vale do Rio Lúrio and the South African-based company Agricane. The plan is to construct two hydroelectric dams and an irrigation scheme covering 160,000 hectares, as well as to develop another 140,000 hectares for rain fed agriculture, contract farming and livestock production (UNAC & GRAIN 2015). The project will focus on the export production of cotton, maize, cereals, cattle, and sugar cane for biofuels. Around 500,000 people living in the area will be affected by the project.

UNAC & GRAIN (2015) explicitly link these initiatives to the push by the World Bank and the G8NAFSN to open Mozambique up to large-scale agribusiness projects.

### ***AGRA: Using CGIAR centres as relays for advancing the Green Revolution agenda***

The Gates Foundation is the world's philanthropist venture with the greatest influence on Africa's agriculture. It is effectively driving the Green Revolution, not only through the implementation of

AGRA and the AATF, but starting with the support of the **Consortium of International Agricultural Research Centers (CGIAR) by making these centres the stepping stone of the Green Revolution** (as it was originally implemented in Asia and Latin America in the 1960s and '70s), but this time jointly with seed and pesticide companies (GRAIN 2014).

Thompson (2014) explains how the systematic reorganization of the agriculture sector in Africa – away from traditional crops and towards homogenization of crops grown on a package of seed, pesticides, and fertilizers – is anchored into **influencing and reshaping the original goal and mission of the 16 international public seed banks**. This work is coordinated by CGIAR, whose core mandate is to make germplasm freely available upon request. According to Thompson's analysis, a small number of firms are thus progressively taking proprietary control over seed in Africa. "Since the formation of AGRA in late 2006, the Gates Foundation, its various offshoots (e.g., the Challenge Program of Harvest Plus and Generation) and allies (e.g., the World Bank, US government) have contributed 45–50 percent of the CGIAR gene bank funding.... As the share of AGRA funding increased, the policies turned more and more to favouring private interests of the agricultural industry" (Thompson 2014:398). As an illustration, she mentions the case of the AGRA-funded International Crops Research Institute for Semi-Arid Tropics (ICRISAT)-affiliated **Matopos research station** in Zimbabwe. In a shift from its original mandate of sharing seed freely with smallholders, the centre has, since 2010, been selling the foundation seed to the commercial seed companies.

### *Shaping national policies*

AGRA is depicted by GRAIN (2014) as focusing essentially on supporting the emergence of private markets for seeds and fertilizers and on shaping policy, notably through national policy action nodes of experts selected by AGRA. In Mozambique, **AGRA's Seed Policy Action Node** was involved in the drafting of the country's plant variety protection regulations in 2013. A portion of AGRA's funding is also allocated to policy and advocacy organizations. But "much of the Foundation's policy and advocacy work is implemented through grants to institutions in the other groups (such as Universities, the CGIAR and, most notably, AGRA), to get African policy makers to change seed, land, IPR and other laws to favour corporate investment and technology introduction" (GRAIN 2014:10).<sup>33</sup>

### *Shaping seed policies*

Obenland (2014) underlines the **astounding speed at which countries, having signed up to the G8NAFSN, are enacting reforms and legislative changes as part of their CFAs**. This is especially true in terms of reforms relating to national seed laws. Such reforms go in the direction of granting **Protection Breeders Rights** based on UPOV 1991.<sup>34</sup> There is evidence that such measures will threaten the human right to food, such as the ratification of the newly drawn up **African Regional Intellectual Property Organization (ARIPO)**'s Protocol on Plant Variety Protection (PVP) (July 2015), which ARIPO members are being pressed to ratify. Under this protocol, the PVP systems adopted result in preventing small-scale food producers from freely conserving and exchanging local seed varieties (ACB 2015a). Mozambique, along with three other African countries, has signed the ARIPO protocol.

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<sup>33</sup> Barely 12 percent of AGRA's grants to universities and research centres go directly to African institutions (US\$80 million total, of which US\$30 million goes to the Uganda-based Regional University Forum set up by the Rockefeller Foundation).

<sup>34</sup> UPOV 1991 is an international agreement that favours commercial seed breeding, this is highly unsuitable for the African context (ACB 2015a).

### *Pushing for regulatory changes regarding fertilizers*

Portrayed as an initiative aimed at helping “African smallholder farmers grow food and profits” (AFAP 2015), AFAP’s stated strategic objective is **to increase the use of synthetic fertilizer on the continent by 100 percent** and the number of users by 15 percent, by supporting fertilizer imports and distribution through direct grants and credit guarantees. AFAP is also geared towards influencing policy and lobbying for regulatory change so that GMOs are adopted throughout Africa (GRAIN 2014).

AFAP’s involvement with the Common Market for Eastern and Southern Africa aims to support regional harmonization of fertilizer policies and regulations, working initially in Ethiopia, Malawi, and Mozambique (ACB 2014). AGRA’s **Scaling Seeds and Technology Partnership**, a two-year project aimed at establishing a regional fertilizer policy and a regulatory framework between Eastern and Southern Africa, is another key initiative that plays a part in shaping seed policies in the regions (ACB 2015a). **Once locked into regional agreements**, countries have limited leeway when it comes to managing their resources at their own discretion.

These developments illustrate how financialization is playing out on the supply side of the agro-food value chain, as PPPs are effectively pushing for the entry of private players into the seed and fertilizer sectors of countries through specific financial mechanisms. The fact that African partner countries are, in the context of their signing up to the G8NAFSN, requested to **change their land tenure regimes and seed laws** to facilitate foreign companies’ land acquisitions and control over national seed markets has been described as “massive corporate land grabbing” (Giles 2015).

### *Pushing for technology transfer*

AGRA, as mentioned, relies heavily on its engagement with decision makers to create an enabling policy environment that will open markets to new farming practices and imported inputs. AGRA is thus a vehicle aimed at training local farmers in the adoption and dissemination of imported technologies. The preferred approach to promote new forms of input consists of “technology transfer,” whereby **a specific input** (e.g., seed/fertilizer/herbicide) **is presented to farmers in optimal growing conditions** (water- and fertilizer-rich environment) to convince farmers of its **performance** (ACB 2015d).

One of the African Centre for Biodiversity (ACB)’s interviewees in Zambia explains, for instance, how even in 2008, farmers were still resisting using herbicides on their crops. But a few years later, repetitive training and enrolment in demonstration activities ended up convincing them that this practice should be adopted for their “benefit” (2015d:62). One such initiative is conducted in Mozambique through **Concern Universal**, an AGRA-funded organization working with small holders in Chimoio. A handful of agro-dealers are offered training to learn about fertilizer and herbicide usage and are encouraged to set up demonstration plots. The reward for completing the training programme is a US\$10,000 loan from the Opportunity Bank (AGRA 2015). This heavy-handed promotion of new practices imported from elsewhere is very **remote from building local resilience** (Holt-Giménez 2008), which would entail training farmers building up their own seed systems and bolstering indigenous systems around integrated pest management and soil fertility.

### *Hijacking sustainable agricultural practices and terminologies for corporate profit*

This leads us to a final but very important consideration of AGRA’s channels of influence, which relates to the **usurpation of sustainable agricultural practices and terminologies traditionally rooted in agro-ecological principles** (see section 6.3). For instance, the **Global Alliance for Climate**

**Smart Agriculture**, launched in 2014 at the United Nations (UN) Summit on Climate Change in New York, is said to essentially represent the interests of corporate fertilizer companies, as testified by the fact that its steering committee comprises several fertilizer companies, their home government (notably Norway and the US), fertilizer lobby groups, NGOs, and companies that work directly with them (GRAIN 2015:6). The ACB (2015d) illustrates this paradoxical dimension, with field evidence showing how the promotion of conservation farming can be construed as “demand creation activities” (ACB 2015b:61), whereby the promotion of intercropping drives demand for leguminous seed – or, more disturbingly, the promotion of no-till farming becomes a vehicle for effectively marketing herbicides. These herbicides are still relatively cheap locally; once farmers are locked into using herbicides, the promotion of herbicide-resistant maize (e.g., Monsanto’s Roundup Ready maize) becomes a fairly straightforward process.

Now that we have mapped the actors of the financialization of food, the next section looks at what these actors invest in and proposes an analysis of food financial flows in East Africa.

### 3. Analysis of financial flows in (East) Africa's agricultural sector

#### 3.1 What types of agricultural assets do financial players invest in?

The financialization of the agricultural sector in the first decade of the new millennium essentially occurred within agro-industries and agro-businesses. As land has generally and traditionally been construed as a risky investment, agribusinesses have tended to focus on value-generating activities along the agricultural value chain, starting from upstream investments (i.e., provisioning inputs such as seeds and equipment) and going to downstream investments (i.e., trading, processing, storing, and retailing food) in the value chain, and thus shunned investments in land (Isakson 2014). This is known as the **farm-to-fork** approach (Cotula 2012). Miller et al.'s (2010) review of AIFs confirms this trend and shows that in the Sub-Saharan Africa context, **70 percent of investment funds are found to invest in agro-industries and agribusiness**, with rural agro-infrastructure being the second most frequent investment focus. Investments can also be made in land and agriculture in other, less visible ways. Cotula (2012) mentions, for example, property portfolios, or a fund of funds that invests in other funds involved with land-based investments.

This section looks into the nature of the investments sought by financial actors and gives an overview of the volumes of investments in question. Specific attention is given to not overinflating the importance of financial actors proportionally compared to local actors. If exogenous capital flows indisputably constitute a game-changing dynamic in the Sub-Saharan African agricultural landscape, it is important to bear in mind that **local African investors remain the primary investors in the continent's food sector**. Also, the highly mediatized land deals are often exaggerated in terms of their scale (Cotula 2012), and they are not only the product of investments from overseas. Henceforth, the role played by an **emergent African middle class** (Jayne et al. 2014a) constitutes an equally important factor to consider when looking at the consolidation of farmland in Sub-Saharan Africa and how this may endanger local food security.

#### 3.2 Volumes of agricultural investments

Globally, commodity investments by institutional players are said to amount to **US\$320 billion**, with **pension funds being hailed as the biggest institutional investors** in commodities in general, as they hold investments amounting to US\$100 billion of this share, and farmland in particular (Barclays Capital, cited in GRAIN 2011), with an estimated US\$5 billion to 15 billion having been directly invested into farmland assets. Barclays Capital (cited in GRAIN 2011) expected to see this figure double by 2015 – meaning that **global investments in farmland assets could today be around US\$10 billion to US\$30 billion**.

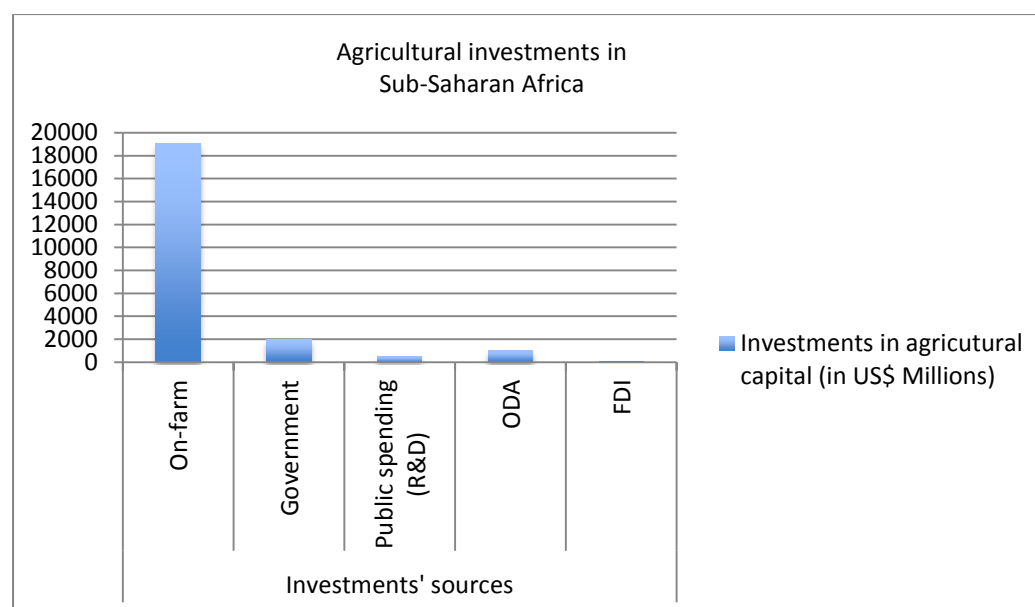
What is striking when engaging with the literature on agricultural investments in Africa is apprehending both the immensity of the recent flows in the sector contrasted with counts of “persistent underinvestment” in the sector (Pardley et al. 2014). Research conducted by the Global Impact Investing Network (GIIN 2015) gives a picture of the volumes and nature of **impact investments**<sup>35</sup> made across East Africa between 2010 and 2015. Over US\$9.3 billion has been allocated to the region through development finance institutions (DFIs) and other impact investors

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<sup>35</sup> Impact investors are defined as those who invest with the intention to generate a beneficial social or environmental impact alongside a financial return – and who seek to measure the social or environmental returns generated by their investments. Investors only interested in a financial return are thus excluded from the GIIN research. However, non-DFI impact investors include “family offices, foundations, fund managers, pension funds, and banks” (GIIN 2015:5).

over the past five years. Although investors solely motivated by profit are excluded from this data, **the top sector for impact capital disbursed in the region is financial services**. The second most important sector of disbursement for non-DFI investors is agriculture, with US\$196.7 million invested in this sector in the region over the period. DFI impact capital disbursed in agriculture amounts to US\$417.8 million, but this sector remains marginal compared to allocations made in financial services, infrastructure, energy, or the extractive industry. In contrast, a recent FAO/World Food Programme (WFP)/IFAD publication estimates that the additional investments in agriculture and rural development required to sustainably end hunger by 2030 should amount to an additional US\$105 billion per year (FAO/WFP/IFAD 2015).

However, this need for additional investments should not be premised on the assumption that these resources should exclusively come from overseas capital. The FAO (2013b) emphasizes how agricultural investment by farmers or the public sector that increases productivity at the farm level would lead to greater availability of food on the market and help keep prices low, thus making food more accessible. A recent study shows that **farmers are by far the largest investors in agriculture** (Lowder, Carisma & Scoet 2012). In low- and middle-income countries, on-farm investment (i.e., by the farmers themselves) in agricultural capital stock is more than three times as large as other sources of investment combined (including public spending, ODA, and FDIs); this ratio is as high as 5 to 1 in the case of Sub-Saharan Africa (based on Lowder, Carisma & Scoet 2012). The relative magnitudes of these investment flows are reproduced in Figure 3; farmers are by far the largest source of investment in agriculture across low- and medium-income countries, followed by national governments, development partners (labelled as “foreign public”), and private corporations (“foreign private”). This similar trend is visible for Sub-Saharan Africa, except that in this sub-region, ODA (US\$1.027 million) is in the same order of magnitude as government investments and expenditure (US\$2.532 million), and FDIs directed to agriculture are marginal compared to other regions in the world.



**Figure 3. Agricultural investments in Sub-Saharan Africa (2005–2007).**  
**Source: Lowder, Carisma & Scoet 2012.**<sup>36</sup>

<sup>36</sup> Note from Lowder, Carisma & Scoet (2012) on the methodology used to compile this data: On-farm investment in agricultural capital is calculated using data on agricultural capital stock from FAO (2012) (it includes capital used in the production process, covering land development, livestock, machinery and equipment, plantation crops, and structures for livestock). Government investment is estimated using data from IFPRI (2012a); public spending on agricultural R&D is from



Some caution is, however, required in considering these trends. First, Lowder, Carisma & Skoet's (2012) research is based on 2005 to 2007. According to Liu (2014), the share of FDI directed to the agri-food sector of developing countries almost doubled between the periods 2000 to 2005 and 2006 to 2008. FDIs contracted in 2009, but their level over 2010 to 2011 was still higher than the average for 2003 to 2007. However, it is critical to bear in mind that **investments made by large private institutional investors** (mutual funds, banks, pension funds, hedge funds, and equity funds) **are not included in estimates of FDI**, so these considerations on FDIs do not bring into question the financialization of food in Sub-Saharan Africa.

It is thus important not to downplay the need for agricultural investments in Sub-Saharan Africa, but to put these existing investments into perspective and to acknowledge the magnitude of local resources. These investments certainly have a part to play in improving food security in Sub-Saharan Africa. Miller et al. (2010) argue that there is huge potential and need for financial investments in agribusinesses. The contention is that investors are unlikely to support small-scale farmers that offer limited prospects for returns on investments, and no collateral (the so-called missing middle<sup>37</sup>). In other words, selecting the right business and financial needs stand at opposite ends of the spectrum, and most of the finances are allocated to farmers on their way to success (Miller 2015, personal communication). It is therefore important to interrogate the types of investments needed and how these will effectively benefit local farmers (see section 6).

### 3.3 Investments in agro-food value chains

This interest in agricultural investments has gone hand in hand with a shift “from a producer-led approach to a market-led one that promotes professional and market-based agriculture enterprises with much stronger linkages within the farm-to-market value chain” (Miller et al. 2010:7). In recent years, a large diversity of investors has become involved in the supply chain, including all the financial actors described in section 2, as well as smallholders, farmers' organizations, cooperatives, and MNCs (Clapp 2014).

Isakson (2014) undertook an interesting analysis of this financialization trend, with a specific focus on how it played out on food value chains. His research looks at global trends in this respect, but underlines the repercussions of the financialization of agro-food chains on the global South. First, financialization has contributed to reinforcing the **preponderant role played by food retailers** within the agro-food system. The supermarketization of the agro-food system, which started in the 1990s, was accelerated by the need to secure new markets in the southern hemisphere: cheap inputs, including labour, could be accessed, and resulted in a large dominance of supermarkets established in OECD countries over food distribution systems in the global South (Reardon et al. 2009, cited by Isakson 2014). Piggybacking on Burch and Lawrence's (2013) analysis of the dynamics between these “**masters of the food system**” (the food retailers) and the “**masters of the universe**” (the financial institutions), Isakson (2014) argues that a **symbiotic relationship has grown between these actors over the past few years**. These multinationals' drive to expand their markets to satisfy their shareholders led to their involvement in **new financial ventures** (insurance, banking, and other financial activities), which has only strengthened their oligopolistic hold over the value chain, at the expense of their workers and food suppliers. Beyond the many ways in which this supermarket revolution has affected economies and livelihoods in northern countries, what is of interest to us is how this has come at the expense of the welfare of small-scale food producers in the global South<sup>38</sup>

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IFPRI (2012b); official development assistance is estimated using data from OECD (2012); and foreign direct investment data are from UNCTAD (2011).

<sup>37</sup> The missing middle refers to the strata of rural enterprises that require between US\$10,000 and US\$1 million.

<sup>38</sup> This is illustrated by the supermarket Somerfield's withdrawal from the Ethical Trading Initiative (ETI) to save costs, thereby entrenching the chain's disregard for labour standards for developing country suppliers (Isakson 2014).

and of the environment of these countries – a trend that is deemed to get more marked as retailers are increasingly willing to source food directly from farmers (a process known as **origination**).

In a similar fashion, a symbiotic relationship grew between **financial actors and actors of the trade and processing nodes of the agro-food value chain**, with the latter diversifying their activities towards financial products, and financial actors in turn becoming increasingly involved in the manufacturing, storage, and distribution of food – with, in both cases, the hegemony of shareholder's values prevailing over workers' and consumers' well-being (Isakson 2014).

The specific **segments of the agricultural value chain that attract investment** are seed/fertilizer companies, horticultural/fruit companies, as well as grain and pulses and livestock and dairy companies (Miller 2010). Isakson's (2014) review of the financial press reveals a **spike in financial investments in "enterprises that produce tractors and other farm equipment, seeds and agrochemicals"** (Isakson 2014:764) since the 2007–08 food crisis, with private equity groups investing in fertilizer producers in China, India, Egypt, Western Africa, and other countries to capitalize on the expected rise in input use to improve productivity. Conversely, agricultural inputs providers have also become more immersed in the financial economy through increased access to credit (Isakson 2014).

### 3.4 Investments in land

Several authors of a Marxist influence attribute this rising interest in farmland as an indication that **northern countries are seeking accumulation opportunities away from saturated domestic markets** (McMichael 2012), a trend which Fairbairn (2014) ironically depicts as a potential indicator of the **"end of financialisation,"** as the asset under consideration is physical and illiquid.

The 2008 food crisis triggered a change of paradigm and shifted agribusiness' attention towards the need to source crops directly – hence the land rush observed in recent years (Cotula 2012). GRAIN (2016) undertook a recent review of global land acquisitions and underlined the changes in these investments patterns between 2006 and 2016. The study shows that many large-scale corporate investments have collapsed (both as a result of poor planning, financial troubles and local resistance) and that opportunistic investments, notably from Gulf "diplomats," have fallen off the chart.<sup>39</sup> According to this analysis, food still features as a driver of investments in land, but far less than agribusiness expansion, implying a rise in the number of companies getting involved in agribusiness and greater financial flows.

#### *Actors of land deals*

The main actors of land financialization were originally endowments and wealthy individuals or families who invested in land acquisition funds. **Agribusiness and industry were and still are the main drivers** of the so-called **land grabs**, but the role of **investment funds** has also been described as being of great significance in this phenomenon (Daniel 2012; Fairbairn 2014). In recent years, the major investments made by **hedge funds and large institutional investors** - which at times also establish their own AIFs- has proportionally dwarfed the weight of agribusiness and industry (HighQuest 2010). GRAIN's review of the sector in 2016 also shows how **pension funds** feature as the most significant agricultural institutional investors. The motivations of these financial players are essentially of a **speculative nature**, whereas government enterprises and agribusiness are arguably essentially concerned with agricultural production (Murphy, Burch & Clapp 2012), although financial

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<sup>39</sup> A case in point is that of Karuturi Global Ltd, an Indian multinational that developed a global cut flower industry in 2014 with vast operations in Kenya. Its flower-trading subsidiary in the Netherlands was declared bankrupt and the Kenyan courts put the flower farm in receivership (GRAIN 2016).

returns are also of interest to the latter (Isakson 2014). This distinction in the motives and profile of actors driving farmland acquisitions is essential; Isakson underscores the caution required in “not conflat[ing] the general outcomes of the land rush with the outcomes that are specifically rooted in financialisation” (2014:767). Actors driven by speculative intention would arguably favour land acquisition, whereas most land deals reported in the literature consist of **long-term leases** (Cotula 2012).

If private companies, rather than government entities, indeed account for much of land acquisition in developing countries, **government policy plays a crucial role in supporting agribusiness-led acquisitions**. The governments of countries that investors come from play a major supportive role for private sector-led initiatives, providing diplomatic, financial, and other support to private deals (Cotula 2012). The involvement of development aid agencies and DFIs in these initiatives is certainly very noticeable (see Figure 6).

### *Countries where investments originate*

Schoneveld (2011) explains that **European firms account for 40 percent of all land acquired in Africa, while North American companies account for 13 percent**. In particular, European and North American firms dominate investments for the production of biofuels in Africa (Cotula 2012). For example, the entire spectrum of biofuel projects reviewed by Nhantumbo and Salomaõ (2010) in Mozambique were managed by European companies except in one instance, where capital originated from South African interests.

Existing cultural, geographical, or business ties very much influence the destinations in which source countries invest. For instance, Gulf countries have favoured investments in Sudan and not so much in the rest of Africa. China seems to have essentially focused on Zambia, Angola, and Mozambique, countries with which it has strong existing bilateral business ties (von Braun and Meinzen-Dick 2009). South Korea, the United Arab Emirates, and Qatar appear as fairly pre-eminent actors of land deals in the continent, with their interest in arable land being driven by their limited natural resources needed for expanding their agricultural production. South Africa is a major investor (both in land and in agribusinesses) in Sub-Saharan Africa, and South African farmers have proved very responsive to agrarian restructuring in their own country by relocating elsewhere on the continent (Hall 2012). South Africa presently invests in more than 26 countries in Africa, and in most countries in the region (Van Burick 2012, in Anseeuw et al. 2012).

**Domestic capital involvement** also plays a key role in these land deals, and in some countries, indigenous capital outperforms foreign investors (Cotula 2012).

### *Target countries*

According to the FAO (2013a), the target countries of agricultural land investments are essentially **the poorest and the least integrated into the world economy**. The FAO’s analysis of the Land Matrix data revealed that some 66 percent of the deals reported were in countries with **high prevalence of hunger**. In the early 2010s, media reports tended to indicate that the largest deals were occurring in East Africa, with **Sudan, Ethiopia, Madagascar, and Mozambique** among the key recipients of land-based investments in Africa (Cotula 2012). Generally speaking, East African countries (such as Mozambique, Zambia, and Sudan) fall into a category characterized as having “suitable land available and high yield gaps”<sup>40</sup> (Deininger et al. 2011). GRAIN (2016), however, noted a contraction

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<sup>40</sup> This typology is further characterized by very small surface areas cultivated (less than 1/ha per rural person) and the fact that the land cultivated does not attain more than 25% of potential output (Deininger et al. 2011).

in the geographical scope of these investments in the most recent databases documenting large land acquisitions. According to these data sets, Africa is still receiving a lot of attention, but investors seem to have shifted away from risky markets, preferring countries where agribusiness is already established and the legal environment favours foreign investors and exports (e.g., Australia) and countries where the export infrastructure is under development and “large areas of land can be cheaply obtained,” such as Mozambique.

**Host countries have also played an active part in promoting such investments** in their own land, spurred by the prospects of development and the seeking of foreign capital. State-owned land that was standing idle was thus earmarked by African countries keen to receive such investments (HighQuest 2010; Cotula 2012). This is the case for the Ethiopian government, which has been actively soliciting countries from the Gulf States into brokering land deals (Borger 2008), although the country is suffering from chronic food insecurity. Investments are especially encouraged in the lowlands, where investors receive preferential tax agreements to carry out mechanized production of oilseeds and other crops, after the government’s unsuccessful attempt at relocating populations from the densely populated areas of the Highlands (Deininger et al. 2011).

### *Volumes and scales of land deals*

Drawing on preliminary findings from the Land Matrix,<sup>41</sup> Oxfam (2011b) reports deals for 227 million hectares worldwide over the period 2001 to 2010. Deininger et al. (2011) carried an inventory of media reports relating to land deals in the immediate aftermath of the 2008 food crisis/commodity boom; their research documented land acquisitions for 56.6 million hectares worldwide between 2008 and 2009. Of this, two thirds, i.e., **29 million hectares, was in Sub-Saharan Africa**, which represents 4.8 percent of the continent’s arable land (Mounet 2013).

In the East African region – at the time when the research was conducted, in 2015 – the countries which had received the most attention in terms of land deals are Mozambique, followed by Ethiopia, the United Republic of Tanzania, Sudan, Uganda, South Sudan, Madagascar, Kenya, Rwanda, and Mauritius.<sup>42</sup>

### *What is the land used for?*

The food crops that investors are interested in are essentially **cash/grain crops**. Such crops are characterized by seasonality, which renders the operations/schedule (planting, fertilizing, spraying, harvest) and, therefore, their costs (seeds, fertilizers, irrigation, labour) predictable; this “fit[s] well with the Discounted Cash Flow (DCF) modelling” of investors (Ducastel & Anseeuw 2014). However, whereas agriculture is the primary driver for the rush for land (representing 70 percent of the size and 65 percent of the number of reliable land acquisition cases in Southern Africa), this does not mean that the large majority of investments focus on food crops. **It accounts for 21 percent** of the total land acquisition cases reviewed by Anseeuw and Boche (2012) in Southern Africa, while non-food crops appear to be the key driver of agricultural land acquisition in **50 percent of cases**. So-called flex crops (i.e., multiple-purpose crops, such as oil palm<sup>43</sup>) account for 12 percent of cases,

<sup>41</sup> Since 2009, a partnership between CDE at the University of Bern, CIRAD, GIGA (German Institute of Global and Area Studies), GIZ and ILC has been systematically compiling information on large-scale land acquisitions. This Land Matrix records transactions that entail a transfer of rights to use, control, or own land through sale, lease, or concession that are 200ha or larger and that have been concluded since the year 2000. The database is now the largest of its kind and publicly accessible since 2012.

<sup>42</sup> Detail on the land deals can be found at <http://www.landmatrix.org/en/get-the-detail/by-target-country>.

<sup>43</sup> In fact oil palm was singled out by GRAIN (2016) as having accounted for a significant portion of land grabs in Africa. The local economies relying on the traditional cultivation of oil palm in the Congo Basin sub-region are reported to have

and multiple-use projects (i.e., projects with a diversity of crops) account for 7 percent of cases. This has tremendous implications for the types of agricultural models developed locally and for food security (section 5).

Global demand for land is predicted to remain high – especially in frontier markets struggling with inadequate governance frameworks, and tenure rights, where the majority of the population is rural and dependent on land for their livelihoods (Global Witness/Oakland Institute/International Land Coalition 2012). More recent media reports revealed that investors were anticipating that **agribusiness would outperform farmland** in the long term, as land investments were hurt in 2015 by returns falling below real estate (Jacobius 2015).

### *Taking some perspective on land grabs*

Although by no means intending to downplay the real impact of land deals in Sub-Saharan Africa, some authors have called for caution in the interpretation of these land grabs that often end up being inflated by media reports. First, large land deals need to be contextualized within the broader historical evolution of agrarian trends in African countries. State-owned plantation and large-scale farming started declining by the mid-1980s, and the sale of these state-owned farms in the 1990s initiated a privatization movement that only aroused the interest of investors from 2004. According to Baglioni & Gibbon (2013), land grabs from the early 2000s onwards thus need to be construed as **the new investment channels** that African states' disengagement in the agricultural sector actively called for. This has been particularly evident in the sugar sector, for instance, with the South African-owned Illovo and Tongaat-Hulett companies having, since the 1990s, purchased or leased state-owned estates in Tanzania, Malawi, Mozambique, Mauritius, Swaziland, and Zambia (Hall 2014).

Second, these land deals appear to have been inflated in the grey literature, not only in terms of the volumes of land considered, but also in terms of the effective land that ends up being farmed. Cotula (2012) shows how between 2004 and 2009, land deals in Ethiopia effectively amounted to 1,190,000 hectares, compared to a media-based figure ranging between 2,892,000 and 3,524,000 hectares. Often, land deals concern a large surface area, but it takes many years before projects reach full capacity. By 2011, actual farming had only started on 20 percent of the announced deals globally (Deininger et al. 2011), although this holding time could also be attributed to the rent-seeking nature of land grabbing (Löhr n.d.). GRAIN (2016) also reports that only a few of the land deals had gone forward in the countries originally targeted, both globally and in Africa.

## 3.5 Agricultural investment flows in Mozambique

### *Land deals in Mozambique*

Following the end of the civil war in 1992, the Mozambican government actively marketed productive land that is strategically located close to the South African market and ports. This translated into a surge of applications for land from potential investors, with the number of informal requests covering a total of 13 million hectares of land (e.g., over 37 percent of the country's territory). An audit that was commissioned by the government revealed the extent of these requests. It revealed that less than 50 percent of the land awarded had actually been used (Deininger et al. 2011) and triggered a **shift in policy towards stronger requirements**. Consequently,

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collapsed under the expansion of industrial plantations. In the DRC for instance, twenty "agro-industrial parks" opened in 2014 under the aegis of the NEPAD.

a temporary moratorium was put on large-scale land concessions at the end of 2009. According to the Oakland Institute (2011), from then until at least mid-2011, no land concessions over 1,000 hectares were made and several large-scale investments were cancelled. Large investments resumed thereafter.

Despite these more conservative regulations, between January 2004 and June 2009, Deininger et al. (2011) found that **2.7 million hectares** were transferred in Mozambique. This figure is strongly correlated to the 2,670,000 hectares found by Cotula (2012), but far below the inflated media reports which more than tripled this figure, with reports of 10,305,000 hectares being the object of land deals (2012:654).

When the research was initially conducted in October 2015, the Land Matrix data available for Mozambique recorded 109 land deals, of which 76 had been concluded and 33 were under negotiation. Of the total 76 contracts signed, some were abandoned and others had not yet reached production stage. At the time of the research, all the biofuel projects (16) had been concluded, and of all 52 food-related investments, 29 were intended projects (e.g., under negotiation). These intended projects, for the most part, pertained to **livestock farming**, with deal requests stemming essentially from private individuals.<sup>44</sup>

|                   | Total deals | Agricultural scope   | Dual scope (Agricultural/other)                                       | Biofuels | Wood & fibre | ... of which contracts concluded  |
|-------------------|-------------|--|---|----------|--------------|---|
| <b>Mozambique</b> | 109         | 52<br>(21 projects for livestock & 31 food crops projects) | 15 (i.e., food crops & biofuels or food crops & non-food commodities) | 16       | 9            | 76 (including 73 with a written contract and 3 through an oral agreement) |

**Figure 4. Land deals in Mozambique.**

**Source: Land Matrix 2015.**

However, a recent update (December 2016) of the Land Matrix data shows a contraction in the number of land deals concluded or in the stage of negotiation. Records show only 26 land deals in forestry and agribusiness investments. This does not mean that the overall number of deals has declined or necessarily fallen through – it is attributable to the fact that some data is taken offline while the Land Matrix data is being updated. The Land Matrix data gives a snapshot of land deals at a given time, making this information a “moving target,” as opposed to GRAIN’s data on large-scale acquisitions (GRAIN 2016). The latter captures data relating to land deals over a whole year. Scrutiny of this data for Mozambique in 2016 shows that a total of 35 deals were underway in 2016.<sup>45</sup> Excluding deals signed for the purpose of energy generation, the dataset breaks down these deals as follow: 15 agribusiness investments, 12 purely financial investments and two food projects. These deals are discussed below.

### *Agro-businesses in Mozambique*

Figure 5 below illustrates the intricate financial arrangements and joint ventures underpinning major investments in land in Mozambique in 2016. As can be seen, investors come from very diverse geographical areas; UK, South Africa, India, Mauritius and Portuguese-based investors feature pre-eminently in the database. The data also shows the importance of pension funds and DFIs as the most common investment vehicles in these land deals, with AIFs (most of which are registered in

<sup>44</sup> Author’s analysis based on the Land Matrix data 2015, <http://www.landmatrix.org/en/get-the-detail/by-target-country/mozambique>.

<sup>45</sup> This data is available on <https://www.google.com/maps/d/viewer?mid=1vV9D2270BCtexhfE-ufLAP1Pc7o&ll=3.81666561775622e-14%2C41.849999000000025&z=1>.



Lioma, and is contracting about 800 small-scale farmers (ACA 2015) to produce soybeans for ACA's poultry farm subsidiary (known as King Frango, one of Mozambique's largest industrial poultry producers); the Swiss Agency for Development and Cooperation provides microfinance for this operation and covers 50% of the costs of machinery and 70% of the operating costs (UNAC & GRAIN 2015).

Soya was first introduced in the Gurué district in the 1980s by Brazil, but the crop only unleashed its full potential when various DFIs (Norway, Switzerland, and US), NGOs (Clusa, Technoserve<sup>47</sup>), the International Institute of Tropical Agriculture (IITA), and the BMGF brought "a [Green Revolution] technological package" to the former state farm. Today, one fifth of Mozambican soya producers and production takes place in Gurué. By 2012, five large companies had started farming soya alongside the numerous small soya growers and emergent farmers in the district. The land rush prompted by the area's soya potential is reported to have already created a shortage of land available for local farmers, and conflicts between investors and local communities are on the rise (Hanlon & Smart 2012). ACA is no exception; the group has to manage tensions with the local community<sup>48</sup> (UNAC & GRAIN 2015).

ACA has also recently installed 90 hectares of trial pivot irrigation to test winter cropping (barley and wheat). The group has deployed significant infrastructure in the area, including a 4,000-ton silo complex in Lioma and a transport fleet to collect the produce from farmers. Similar platforms are planned for Zimbabwe, Zambia, and Uganda (ACA 2015). The company intends to "develop into the leading white protein agri-business in Sub-Saharan Africa, capturing as much of the value-chain as possible from farm to fork" (UNAC & GRAIN 2015).

### **Box 7.: Agro-business investments in Mozambique: The case of Matanuska Moçambique Limitada**

Matanuska Africa Ltd was established in 2008; the company, known as "Matanuska," produces bananas in the Nacala Port district, located in the Northern Province of Nampula and on the Nacala growth corridor. The company's land holding covers 16,000 hectares. The first phase of the project aims to establish a total of 2,500 hectares of banana plantations by the end of 2015, with large expansions envisaged in the future. Matanuska reports that it provides employment for 2,600 people (Rift Valley 2015). The plantation rests on extensive water resources, with trees being fully irrigated by a system fed from a dedicated 55 million m<sup>3</sup> dam. The business counts six fully operational pack houses and is able to supply bananas under various customer brands upon request (Rift Valley 2015).

Matanuska is a subsidiary of the Rift Valley Corporation, which owns 33.3% of the business and is active in Mozambique, Zimbabwe, and Tanzania. Other equal partners include Matanuska Mauritius (33.3%) and Norfund (33.3%). Capital into the business comes from equity capital (US\$3.7M) and loans (US\$4M) (Norfund n.d.). In early 2014, Dole Fresh Fruit Europe announced a long-term partnership with Matanuska aimed at increasing banana production in Mozambique. Under this deal, Dole Fresh Fruit Europe is responsible for all sales operations and becomes the sole distributor of Matanuska bananas in Africa, Europe, and the Middle East (Fresh Fruit Portal 2014). Dole Fresh Fruit Europe Company is part of Dole Food Company, a US-based agricultural corporation, which claims to be the largest producer of fruit and vegetables in the world.

As in other agro-businesses in the country, Nordic countries are also involved, with Norfund contributing funding in the form of equity, loan, mezzanine, and guarantees (Norfund 2015).

#### *Socio economic & environmental impacts*

The establishment of the company was fraught with accusations of poorly conducted consultation with the community, lack of information, and unfulfilled commitments. Workers at the plantation in the early days of operations had many grievances, including labour law violations, which led to a large protest by the plantation's employees in 2010 and required the intervention of the governor of Nampula province, who set up a provincial crisis management commission to resolve the conflict. In interviews, local community members complained about displacements to make way for the plantation and about losing access to fertile land and water resources, which is spurring hunger locally. No information could be found concerning the potential

<sup>47</sup> Technoserve, a US-based NGO that develops "business solutions to poverty," is the NGO that receives the most funds from the BMGF. Running on a US\$80 million annual budget, it received a total of US\$85 million from the BMGF over the last 10 years (GRAIN 2014).

<sup>48</sup> More specific information on the nature of these conflicts with ACA could not be found.



environmental impact of the banana plantation. Suffice it to say that such large-scale monocultures require intensive inputs; on many banana plantations, fungicides and insecticides are applied as many as 40 times a year, amounting to a total use of nearly 44 kilograms per hectare (Mlot 2004).

## 4. How agricultural investors operate in (East) Africa

To comprehend how investors become effective actors in the financialization of food, it is important to understand their *modus operandi* – in other words, to grasp what type of financial instruments and investment vehicles are used to profit from Sub-Saharan Africa's agricultural sector.

### 4.1 Types of financial instruments and investment vehicles

#### *Financial instruments*

New, highly complex financial instruments have emerged in the agricultural sector, many of which are speculative in nature. These investment options include, for instance, the aforementioned commodity index funds (CIFs), commodity exchange traded funds, or commodity index swaps (see Glossary). Ouma (2014) describes the four main categories of financial assets used by these financial players. These are paraphrased below:

- i. Investors can invest in vehicles such as **private equity funds**<sup>49</sup> that are not listed on the stock exchange, **managed investment trusts**, or **agricultural investment funds (AIFs)**. Investors' money is pooled into such (often hybrid) funds and managed by a specialized asset manager, then channelled into agricultural ventures. Such agricultural ventures may entail the purchase or leasing of farmland to other farmers (Fairbairn 2014; Ouma 2014), or investing directly in primary production (Daniel 2012; Ouma 2014). Such equities in agro-food companies usually have a limited life span, from seven to 12 years on average (Goldberg et al. 2012).
- ii. Investors can capitalize on agricultural assets by investing in **privately held or publicly listed companies involved in primary production** (Ouma 2014);
- iii. Investors can channel their investments into whole **value chains from farm to fork**, comprising companies involved in input production, agricultural production, processing, commodity trade, and logistics (Burch & Lawrence 2013; Isakson 2014);
- iv. Finally, they can invest in listed vehicles such as **mutual funds** (Ouma 2014) and channel capital into listed exchange-traded farmland funds.<sup>50</sup>

The operation of these funds and their governance structure is highly variable, according to their **mandates** (return on investment for private investors versus development gains for institutional investors), their return expectations, and the **degree of implication of the investors in the day-to-day operations**<sup>51</sup> (Ducastel & Anseeuw 2014).

Another important characteristic of these investments is their heterogeneity, both in terms of the nature of legal entities that constitute them and the **geographic location** thereof. These funds essentially originate from OECD countries and can, for instance, be registered in fiscal paradises and operate in Africa. Such fiscal paradises include Mauritius (Ducastel & Anseeuw 2014), the Cayman Islands, and Panama (Cotula 2012). Among these vehicles, **non-listed funds are the most common**

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<sup>49</sup> Private equity refers to medium- to long-term finance provided in return for a stake in high-growth companies, which sometimes can also be start-up companies. A private equity fund is the entity that invests the money raised from investors into a company/enterprise, where it generally attempts to gain control over companies in order to restructure the company and ultimately sell it for a profit.

<sup>50</sup> An exchange-traded fund tracks a basket of agricultural commodities (Goldberg et al. 2012).

<sup>51</sup> "The non-disclosed funds don't have to inform the managers about these daily operations, while disclosed funds have an obligation to build an informational flow from the grounds to the investor(s)" (Ducastel & Anseeuw 2014).

and influential form of financial instruments in the financialization of Africa's food sector. (See Box 8 for an illustration of some of the most important funds operating in East Africa.)

**Box 8.: Private equity funds operating in East Africa**

**Agri-Vie**, a US\$100 million private equity fund, was formed in 2008 by Sanlam Private Equity and the investment group Strategy Partners for the sole purpose of investing in businesses operating along the agribusiness value chain (Mhlanga 2010). Agri-Vie counts many investments in Africa, notably for the Development Bank of Southern Africa and private investors. Its portfolio of investments in East Africa include Africa Juice (Ethiopia); the New Forest Company (NFC), with operations in Uganda, Mozambique, Rwanda, and Tanzania; the Kariki Group (Kenya based, exports specialist flowers to markets in Europe and the Far East); and Vida Oils (with operations in Mozambique and South Africa) (Agri-Vie 2015).

**AgDevCo** invests in the agriculture sector in Sub-Saharan Africa, focusing on early-stage businesses that are starved of capital. To date it has backed 45 small and medium enterprises and committed \$60 million.

**Actis Africa Agribusiness Fund (AAAF)** is an agricultural investment fund created in 2004 following a restructuring of CDC Group PLC (previously the Commonwealth Development Corporation). This US\$92.7 million private equity fund covets most agribusiness funds that have recently sprung up to take advantage of the food crisis (Miller et al. 2010:92). AAAF invested in the tea company Tatepa, whose market capitalization had grown from US\$3.3 million to US\$5.8 million in six years. Tatepa holds a 55-percent share of the Tanzanian tea market and provides employment to 17,000 people. It also has a greenfield plantation investment in Kilombero Valley Tea Company, United Republic of Tanzania.

**SilverStreet Capital's Silverland Fund** is a specialized 10-year AIF engaged in farmland investment in Africa, with expected returns of 15% to 20%. The fund is primarily involved in Malawi, Mozambique, South Africa, Tanzania, Uganda, and Zambia, for the production of cereals, soybeans, fruits, vegetables, sugar, tea, and coffee. Its investors include \$47.9 million committed by the Danish public pension fund PKA (Pensionskassernes Administration) (GRAIN 2011).

The **African Agricultural Capital Fund (AACF)** is the successor to the African Agricultural Capital (AAC)<sup>52</sup> Company, which in 2011 was restructured from a limited company into a closed-end private equity fund (the AACF), with a total \$25 million investment from Gatsby, Rockefeller, the BMGF, and JP Morgan's Social Finance unit. The intent of this fund is to entice investors into investing in small and medium-sized agribusinesses in Africa. A separate fund management company, Pearl Capital Partners (PCP), manages the fund – see below (Gatsby Foundation 2011). Investments by the new fund will range from US\$200,000 to US\$2.5 million, with the fund seeking returns of 15% across the AACF (GIIN 2012). One of AACF's first investments was a \$1.2 million mix of equity and debt in Northern Uganda Agricultural Centre Ltd (NUAC) to expand its large-scale mechanized farming model from 250 hectares to 1,000 hectares of land (PCP 2012b).

*In focus: Agricultural investment funds*

Agricultural investment funds (AIFs) are perhaps one of the most pre-eminent investment vehicles to emerge in the context of liberalization of the agricultural sector. These can be seen as the most important drivers of the financialization of agriculture in developing countries in general, and especially in Sub-Saharan Africa.

Buxton, Campanale & Cotula (2012) investigated the drivers of agricultural investments by AIFs and the impact of these investments on recipient countries. The rationale for investments in agriculture

<sup>52</sup> The African Agricultural Capital (AAC) company was established in 2004 as an investment vehicle to channel "finance to small and medium-sized enterprises (SMEs) in agricultural value chains." To benefit from the opportunities arising in the agricultural value chain for SMEs, the company was capitalized in 2005 with funding from the Gatsby, Rockefeller, and Volksvermogen (a Belgian "impact investor") foundations. With this initial capital outlay of US\$8 million, AAC had by 2009 made investments in a portfolio of 16 businesses across East Africa. Across the whole fund, seven exits have been completed (date unspecified), with a reported gross return on investment of 8% (Gatsby Foundation 2015).

and land were found to be three-pronged, and include **pooling resources between investors** – larger investment opportunities would otherwise be out of bounds to individual investors; **investment diversification** (and thereby hedging risk); and **reducing transaction costs** (Buxton, Campanale & Cotula 2012). Having specialized fund managers with sector-specific expertise to support the individual investment also helps reduce risk (Miller et al. 2010; Mhlanga 2010). These AIFs increasingly target developing countries and are banking on rising farmland values (especially true for Africa, where farmland prices are comparatively low and expected to greatly rise in value) combined with increased productivity.<sup>53</sup>

Miller et al.'s (2010) survey of 31 AIFs showed that **equity and private equity funds** were the most common investment vehicles in the sector, both in terms of capital base and number of funds. Their study found that these AIFs' capital bases ranged between US\$8 million and US\$2.7 billion, with 68 percent having a capital base of less than US\$100 million. One third of the funds were solely private capital investment funds, and 58 percent (with the remainder being private capital funds) were public-private partnerships, which is highly indicative of the interest of the donor and development finance community in supporting agricultural development through investment vehicles. These partnerships in return offer an opportunity for the private sector to build synergies with the public sector (risk sharing) (Miller et al. 2010). One of the main AIFs operating in East Africa is Pearl Capital Partners (see box 9).

**Box 9.: Pearl Capital Partners (PCP): One of the main AIFs operating in East Africa**

One of the most important/visible investment management firms operating in East Africa is Pearl Capital Partners (PCP). It administers the investment portfolio of three agribusiness-focused funds, essentially on behalf of AGRA, in East and Southern-Africa, including the following:

Fund I: African Agricultural Limited – this US\$8 million fund has fully invested in 16 agribusinesses, and exits out of these funds are under way.

Fund II: African Seed Investment Fund (ASIF) – this fund was started in 2013 with a capital of US\$12 million fully invested in 13 agribusinesses by 2013. The investments were made across seed enterprises in Kenya (Western Seed and Dryland Seed), Uganda, Malawi, Mozambique, Tanzania (Highland Seed Growers Ltd in Tanzania, structured as a quasi-equity debt instrument), and Ethiopia.

Fund III: African Agricultural Capital Fund (AACF) – this fund was started in 2011. By July 2014, 60% of the US\$25 million capital had been committed to eight agribusinesses.

A fourth fund was formed in 2016; it was raised jointly with Voxtra AS.

The sizes of the investments managed by PCP range from US\$500,000 to US\$2.5 million in growing or medium-sized businesses in East Africa. The financial instruments used by PCP include a combination of debt, quasi-equity, and equity instruments. The investors of the fund include J.P. Morgan (the investment banking arm of JPMorgan Chase & Co.), USAID, the Gatsby Charitable Foundation, the Rockefeller Foundation, the BMGF, AGRA, and Volksvermogen NV (PCP 2012a).

### *Investment vehicles*

Many types of investment vehicles are used to bolster investments in the African agricultural sector. Here is a non-exhaustive illustrative list of such vehicles:

<sup>53</sup> The more recent study by Buxton, Campanale & Cotula (2012) confirmed this trend and counted around 190 private equity firms worldwide investing in agriculture and farmland.

- **Matching grants** are a financial instrument that plays a role in the financialization of the sector, especially through partnerships, which can therefore ensure the penetration of African markets by MNCs. The AFAP provides “real” finance to private companies coveting these markets through matching grants (ACB 2015a).
- **Credit guarantees:** Guarantee mechanisms are conceived to provide access to debt capital or to leverage additional funds provided by local financial intermediaries through a risk-sharing mechanism. This plays a part in mitigating risks associated with agricultural investments and in addressing collateral needs for borrowers deemed as risky (Miller et al. 2010:17). In parallel to its matching-grant mechanism, AFAP provides credit finance to small-scale farmers who wouldn’t otherwise be able to purchase inputs without loans or subsidies (ACB 2015a). This mechanism is also used by development agencies; USAID uses the Development Credit Authority to mitigate the perceived risk of lending to underserved clients and covers up to 50 percent of a private lender’s risk (Mhlanga 2010).
- **Syndicated loans** focus on including third-party private-sector financial institutions as co-lenders in their investments. Under this structure, when DFIs (the main users of this type of finance) make loans, they retain a portion of the loan for their own account (the direct loan) and sell the remainder (the syndicated loan) to participating financial institutions (banks). This provides participants with lower default risk through the DFI’s strong creditor status, while enlarging the pool of capital available to borrowers (GIIN 2015). An example of such loans is the IFC B loans (IFC 2015a).
- **Asset management products** are another financial instrument developed to raise more private-sector funding for development finance objectives. An example includes the IFC’s asset management arm, launched in 2009; this entity has raised six funds with over US\$6 billion under management (IFC 2015b). Pension funds, insurance companies, other private-sector actors, and public and quasi-public institutions fund the model. Close to US\$4 billion has been disbursed across 57 investments globally, and more than 90 percent of the assets under management are available for investment in East Africa (GIIN 2015).
- **Microfinance investment vehicles (MIVs)** are also described as a new investment class (Miller et al. 2010). Microfinance funds, however, have one major difference: a majority of them worldwide are structured either as debt funds lending to microfinance institutions or as combined debt and equity funds. They often only invest equity after a relationship is established, as opposed to AIFs, which require equity from the start in order to obtain loans (Miller et al. 2010).

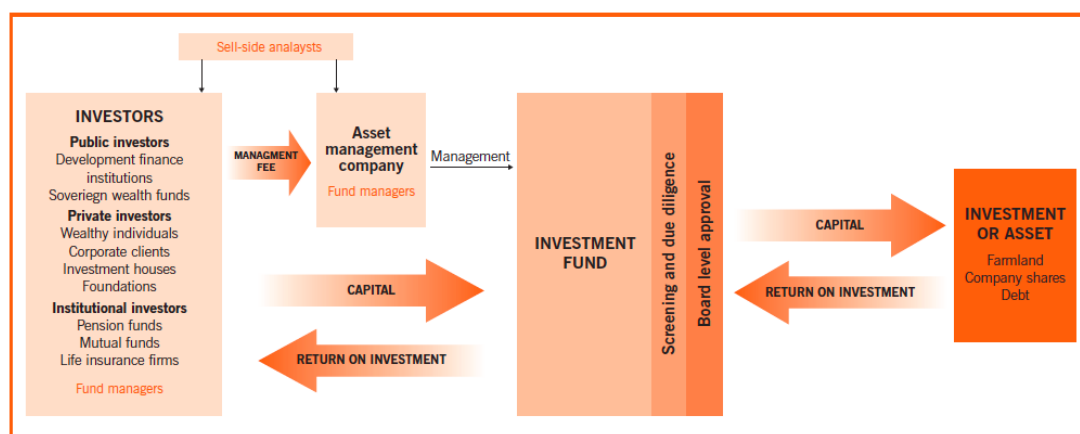
**Box 10.: Credit guarantees in Mozambique: The case of AFAP**

AFAP is strengthening its links with banks such as Stanbic, Barclays, and ProCredit, and several banks in Mozambique, by offering credit guarantees for fertilizer import companies and presumably for farmer credit (ACB 2015a). Upstream, credit guarantees to fertilizer companies support the large-scale and risk-free importation of fertilizers into the country; downstream, they serve to provide credit backing for the purchase of fertilizers by small-scale farmers who would otherwise be deemed not credit worthy. This is tantamount to virtually removing all risks for fertilizer companies, which then access open and receptive markets in Africa.

## 4.2 How agricultural deals are brokered

In terms of the modus operandi adopted by these investors, most of the time investment deals entail partnerships and involve asset managers. Ducastel & Anseeuw (2014) analyzed the specific role played by intermediaries, such as locally based fund or portfolio managers serving in African agriculture as “financialization mediators” (Morales & Pezet 2010, cited in Ducastel & Anseeuw 2014) between the global financial industries and the agricultural sector. Their analysis of asset managers’ management approaches and relationships with investors, farmers, workers, and government sheds some light on the concrete mechanisms of diffusion of financialization. They

explain how the various investment funds described above raise capital on financial markets and channel it toward investment opportunities they identified, progressively building an asset portfolio. In doing so, their fiduciary duty (moral obligation) is to ensure that such investments are carried out wisely to balance out expected returns and risks.<sup>54</sup> The potential investments to be included in the portfolios are subject to due diligence processes and screening before approval by the investment board, as captured in Figure 5 below.



**Figure 6. Investors and how they structure their investments.**

**Source: Buxton, Campanale & Cotula 2012.**

### 4.3 How farmland is acquired

When it comes to investing in farmland, each investment deal may involve a complex web of multiple parties, as illustrated in Figure 6. The players involved in large land deals include end investors, asset management companies, and lenders. The latter grant both equity and debt financing to companies that lease land (this latter aspect is not captured in the figure). Cotula & Blackmore (2014) explain how “these [asset management] companies then interact with governments and [sometimes] communities, often through intermediary brokers – and once the deal is done, they interact with other private sector players such as the contractors and suppliers of goods and services, and the buyers of whatever the land produces” (2014). **Partnerships to invest in land can be collectively financed;** in 12 percent of cases collected by the Land Matrix Project, foreign investors had built partnerships with domestic companies. **Foreign investors hailing from different countries also often enter into partnerships,** with investors from the United States, the United Kingdom, and South Africa having formed such partnerships in about a third of the deals in which they are involved (Anseeuw et al. 2012).

What transpires from the literature on the topic is that the passing of land into private hands doesn’t necessarily entail new land. Many investors prefer to **take over the management of existing farms**, which were often established or run by para-statal entities, and rehabilitate existing irrigation schemes and other infrastructure, as opposed to acquiring land to initiate greenfield activities.<sup>55</sup> Acquiring existing businesses lowers the degree of risk (Buxton, Campanale & Cotula 2012) and makes land tenure more secure (Schanzenbaecher & Allen 2015). In these instances, changing management and improving technologies and agricultural practices become the key drivers of

<sup>54</sup> The probability that the pressure to maximize profit will come to the detriment of other (welfare and environmental) considerations is high (Buxton, Campanale & Cotula 2012), although as will be discussed, ESG concerns have come more and more to the forefront.

<sup>55</sup> As in the aforementioned example of Ilovo Sugar taking over government estates in several Southern African countries over the past two decades.

increased productivity (Buxton, Campanale & Cotula 2012). Another corporate strategy to access land involves acquiring equity participations in companies that already have plantations. Cotula (2012) reports that some agribusiness companies willing to expand from a particular segment of the value chain (e.g., traders, processors) to agricultural production have resorted to this strategy.

#### 4.4 Historical performance of investments and expected returns

Investors' return expectations in the agricultural sector are said to range from 3 percent to 25 percent (Ducastel & Anseeuw 2014). The Commonwealth Development Corporation (CDC), for instance, has historically set the commercially viable rate of internal rate of return (IRR) to 15 percent (Dixie 2011). However, these return expectations depend on the form of investments made; investors in established farming operations in productive areas are said to expect an IRR of 7 to 10 percent, given the relatively modest level of risks such operations present. In contrast, for investors putting their money in so-called conversion strategies (whereby non-producing or low-yielding land is targeted to become high yielding, through capital investments and the modernization of farming techniques), this IRR rises significantly, to 15 to 25 percent; such is the case, for instance, of investors wanting to convert grazing land to high-producing cropland (Goldberg et al. 2012:7).

## 5. Local impacts of the financialization of food

Financial actors who know little about the physical production of food are affecting the real world of food production and consumption through investments on commodity futures markets. As such, financialisation has further abstracted food from its physical form. This financialisation ... has reshaped the way in which food markets interface with financial markets. (Murphy, Burch & Clapp 2012:6)

When discussing the impacts of such financialized investments at a local level, what needs to come under scrutiny are the **potential returns for local communities and the assessment of potential negative impacts**. As such, investments are often put forward as means to contribute to food security or local economic development; these should thus be aspects that are the most prevalent in terms of returns.

This section looks at the primary implications of the activities of these financial actors (particularly private foundations and international initiatives mentioned above), especially relating to the agricultural models that they foster in (East) Africa, in terms of food access by the global poor, the livelihoods of small-scale farmers worldwide, and our increasingly fragile ecosystems.

There is a clear dichotomy in the appreciation of how large-scale commercial land deals affect local communities; some underline the economic and livelihood benefits of putting to work land that is seen as idle or underproducing, while others point to the fragmentation this causes among farming communities that end up losing farmland. These are two true dimensions of foreign direct investments in developing countries. Evidence from recent research on the topic suggests that **it is essentially investors who get returns through increased land values and productivity**, be it for speculation, biofuel, or food production earmarked for repatriation (Mbataru 2014). **The returns for local people tend to be limited to jobs (if any) or general** (e.g., roads, water access) and **social infrastructure** (schools, health centres) (Buxton, Campanale & Cotula 2013). The evidence of economic returns at a national or local level remains scarce, especially if we take into account that tax breaks granted by host countries reduce scope for public revenues (Buxton, Campanale & Cotula 2012). The question of food repatriation is also seminal; to date, two thirds of land deals in Africa have taken place in countries facing food shortages. One must question whether large investments geared towards monoculture growth can remedy any of the agricultural problems encountered locally.

### 5.1 What kind of agricultural models do these finance flows shape?

The financialization of food in (East) Africa, which unequivocally translates into **embracing the Green Revolution production paradigm**, has precipitated a “new phase of accelerated agrarian change” (Badiglioni & Gibbon 2013) on the continent. Because private equity funds typically invest in products they seek to resell for a profit, they finance developments that ensure a **scale up of production** (hence the push for patented seed varieties, synthetic inputs, and machinery) and its **delivery to global markets** (hence an emphasis on supporting distribution and marketing in the value chain). These investment trends irrevocably translate into the adoption of **large-scale monoculture practices, to the detriment of subsistence practices and knowledge**.

The conventional approach to increase food supply (given its perceived success in the recent past) is based on a **rejuvenation of the agro-industrial model**. This model rests on a three-pronged approach: expanding the area of agricultural production (extensification), increasing productivity (intensification), and “modernizing” agriculture through “continued generic technological advances” (Horlings & Marsden 2011). This is the model that seems to be emerging from the financialization of



food in (East) Africa, with **land deals contributing to the global extensification of the food production base, large agro-business investments contributing to the intensification of food production, and the Green Revolution paradigm bringing in all the elements of so-called ‘modern’ agriculture to the continent.**

### *The push for advanced technologies*

The Green Revolution advanced technologies that go hand in hand with large agro-business are often imported from other geographical areas or non-agro business sectors. Critics say that the Gates Foundation supported AGRA in promoting **an imported model of industrial agriculture** based on the high-tech seeds and chemicals sold by US corporations (GRAIN 2014). This is verified by the fact that grant money from BMGF funds the development of new biotechnology, like the genetically modified (GM) banana developed for Uganda. It is also used to educate African scientists in these new technologies so that they may promote them on a local level (AGRA Watch n.d.). Importantly, some measures, such as GM technologies and input subsidy programmes (AFAP), face the **agricultural technology paradox** of southern Africa of “increasing availability of new technologies with low effective demand for them” (International Food Policy Research Institute [IFPRI] 2013). As mentioned in the section discussing technology transfer as a channel of influence of PPPs (section 2.2), these technologies often must be repeatedly demonstrated (in optimal conditions) to eventually convince local farmers.

These technologies ineluctably and irrevocably cause deep mutations in which local agribusinesses operate. Once the commitment is made to embrace technological advancements and continued scale enlargement, **farmers are locked “into the ‘treadmill’ of production and profit maximisation”** (Ward 1993, cited in Horlings & Marsden 2011); many farmers are unable to compete in this new configuration. Furthermore, the yield gains experienced with Green Revolution technologies generally lead to decreases in other crops as well as a reduction in agro-ecological knowledge (Bezner Kerr 2012).

### *Greater use of and reliance on synthetic inputs*

Overall fertilizer consumption figures in Africa have historically been low, with average fertilizer application rates across the continent increasing from around 4 kilograms per hectare in 1970 to around 8 kilograms per hectare in 1996, with current figures estimating current usage in Sub-Saharan Africa at 12 kilograms per hectare.<sup>56</sup> This picture is, however, rapidly changing, with Sub-Saharan Africa reported to be the world’s fastest-growing fertilizer market, increasing by an estimated 8 percent per year (ACB 2015a). If this increase has been driven primarily by the return of state input subsidy schemes since the 2008 food crisis, donor-led initiatives such as AGRA and its most important grantee – AFAP – have certainly been instrumental (IFDC 2012). Increases in fertilizer usage, which forms part of the metanarrative that food security in Africa relies upon increased fertilizer input, are driven by **economic growth and not environmental** (e.g., the destruction of soil micro-organisms/pollution) **and social concerns** (ABC 2015a).

The ACB (2015d) uses the case of Zambia to capture the vicious circle set in motion by the Green Revolution’s focus on inputs and intense practices to the detriment of the commons, resulting effectively in the so-called need for synthetic fertilizers. In Zambia, the intensification of agricultural production led to shorter fallow periods and translated into soil degradation (nutrient loss and erosion). This issue was compounded by the loss of significant quantities of organic manure, as close to half of the country’s cattle was slaughtered in the 1990s as a result of the government discontinuing cattle dipping (as public

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<sup>56</sup> The overall trends in data on the use of fertilizer mask considerable variability among countries, as Ethiopia, Kenya, Nigeria, and South Africa represent the bulk of fertilizer usage on the continent (fertilizer.org 2015).

expenditure in the sector was contracted) (IFAD 2014, cited in ACB 2015d). In other words, **the intensification of agriculture leads to nutrient depletion, which in turn calls for the use of synthetic fertilizers.**

### *Towards monoculture cultivation*

As we have seen with the case of Mozambique, large agro-businesses funnel money into plantation-style rural ventures that impose **chronic dependence on external technological inputs and global export markets.** This is why agricultural growth corridors are so important to the expansion of the Green Revolution model: fertilizers and synthetic fertilizers and pesticides need to be imported in large quantities, and in turn the goods produced need to be swiftly transported to their export markets.

Although growing monoculture crops for exportation is not a new trend, **this phenomenon of monoculture cultivation will be exacerbated by the involvement of new financial players in the food arena.** The rising demand for energy (biofuel and biomass) and long-standing crops (e.g., sugar cane, palm oil) will further drive this trend as more land is put under cultivation of non-food crops (e.g., jatropha for energy). Similarly, the ongoing push for biomass energy from industrialized countries will drive an increase in tree plantation in the south (Cotula 2012:673). Global changes in food consumption patterns – notably, the “meatification” of diets (Horlings & Marsden 2011) – is another important factor in shaping commercial agriculture in Africa. Although the increase in meat consumption in Sub-Saharan Africa remains marginal,<sup>57</sup> with the most significant increases on the continent being observed in northern African developing and emerging economies (DEE) (Westcott & Hansen 2015), foreign investors from other DEEs, notably Southeast Asia, certainly covet Africa’s livestock production potential to cover their meat requirements, although this dimension remains largely undocumented. The preponderance of livestock farming projects among the agricultural investments recorded for Mozambique in the Land Matrix illustrates this phenomenon; it can be assumed that meat produced will not be exclusively destined for domestic markets.

### *A strong reliance on single-export commodities*

The financialization of the agricultural sector might exacerbate the risks associated with over-reliance on one export commodity. Access to markets entices farmers to produce **cash crops, to the detriment of subsistence crops.** This over-reliance can be risky: when the price of the commodity drops, farmers are at risk of incurring heavy losses and are discouraged from producing in subsequent seasons. This situation occurred in Uganda during the coffee boom of 1994–95, during which farmers increased production. The subsequent decline in prices resulted in the neglect of coffee farms and contributed to the spread of coffee wilt disease (Kyagalanyi Coffee Limited, cited by FAO 2013a:148).

## 5.2 Economic impacts of the financialization of food

The FAO (2013a), in a report titled *Trends and impacts of foreign investment in developing countries’ agriculture*, found that **in the long run, FDI contributed positively to increasing agricultural production and yields in the global South.** It also found that FDI favoured the diversification of crops and gave evidence of higher export earnings for some countries. In some cases, foreign investments led to the adoption of higher standards and contributed to the development of infrastructure. Job creation in some countries is also put forward as a positive impact of FDIs; for instance, 3,000 jobs were created in Uganda in 2009 as a result of FDI in the agricultural sector. There is also some

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<sup>57</sup> See <http://www.fao.org/docrep/005/y4252e/y4252e05b.htm>.

evidence that FDIs promote technology transfer, but seldom to the level announced by investors. The report underscores that these benefits do not arise automatically and are conditional upon specific parameters; the case studies also reveal significant evidence of negative social and environmental impacts. Nonetheless, it is certain that the cumulative acquisition of large areas of land, compounded by financialization dynamics in Africa, will cause an irreversible **shift away from family farming, the backbone of African agriculture, towards large-scale farming** (Buxton, Campanale & Cotula 2012:4).

### *Distortion of agricultural markets*

One of the most direct incidences of this financialization trend on global and regional markets is a **greater concentration of commercial power within a few agribusinesses**. As local and regional producers increasingly rely on imported inputs, this will reinforce the degree of vertical integration within farms and agrochemical, pharmaceutical, and seed and food corporations, which are essentially based in the United States and Europe (Bezner Kerr 2012). Concentration is also happening in land tenure (the so-called latifundition phenomenon), as a product not only of commercial investments from overseas, but also very much a domestic phenomenon, as local medium and large investors keep on acquiring agricultural land (Jayne et al. 2014a). This vertical integration of food systems will irrevocably lead to small-scale farmers losing their market power and foreclosing their agricultural expansion strategy, as available cropland is becoming increasingly scarce. This in turn could exacerbate localized food insecurity and lead to greater dependence on food being produced elsewhere.

### *Consolidation of the seed sector and expropriation of local genetic resources*

The consolidation occurring in the agricultural sector is especially true of the seed and fertilizer sectors, which have been subject to systematic and ever-escalating consolidation over the past decade.<sup>58</sup> Vehement critics of AGRA describe the programme through the lens of **philanthrocapitalism** (Thompson 2014) to show that the multiple acts of **genetic resource expropriation** currently happening across Africa, combined with the expectation that countries should change their land and seed policies to favour the appropriation of local resources by foreign investors (Giles 2015), form part of a strategic vision aimed at systematically “replacing public agricultural sectors with private business practices and control” (Thompson 2014).

An illustration of how these financial actors contribute to penetrating the seed sector in Africa is given by the **AGRA-backed African Seed Investment Fund (ASIF)**. ASIF is managed by PCP (see Box 11) via its wholly owned subsidiary, PCP Uganda. Over the past three years, ASIF has committed capital of more than \$8 million to 11 seed businesses in East and Southern Africa.<sup>59</sup> The strong involvement of MNCs in Africa’s seed market and the privatization of the seed sector this entails has potential tremendous implications in terms of small-scale farmers’ farming practices, as it will preclude them from saving and sharing seeds. It will also result in the loss of seed diversity and sovereignty by farmers and potentially jeopardize local food sovereignty.

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<sup>58</sup> For a detailed overview of this topic, see the recent research paper by the ACB (2015), “The expansion of the commercial seed sector in sub-Saharan Africa: Major players, key issues and trends,” <http://acbio.org.za/the-expansion-of-the-commercial-seed-sector-in-sub-saharan-africa-major-players-key-issues-and-trends>.

<sup>59</sup> AAC/PCP investments in seed enterprises to date include Nalweyo Seed Company (Naseco), Victoria Seeds, and Farm Inputs Care Centre (Fica) in Uganda; Western Seed Company and Dryland Seed Ltd in Kenya; and Fica in Tanzania (PCP 2012a). Victoria Seeds, Dryland Seed, Funwe Farm, and Seed-Tech have also received separate AGRA grants under the SEPA programme (AGRA grants database).

### ***The emergence of global closed circuits***

This consolidation trend will be compounded by the importation of agricultural goods produced in countries where governments acquire or lease land, thus meaning that “a growing share of world agricultural trade will occur within the ‘close[d] circuit’ of corporate ... systems” (Anseeuw, Ducastel & Gabas 2011), thus marginalizing local peasantry from food production markets.

In turn, this vertical integration of value chains trend will have adverse impacts at a regional/local level in Sub-Saharan Africa by virtually **squeezing out local operators and multiplying occurrences of tax avoidance through transfer pricing within intra-firm transactions** (Anseeuw, Ducastel & Gabas 2011). Also, the Green Revolution trademark of promoting inputs as a key tenet of their interventions invariably translates into the **expansion of output markets** to absorb increased production of crops produced in a more standardized form (ACB 2015c:9). We therefore end up in a situation whereby these markets must be actively created.

### ***The latifundition of land***

Jayne, Meyer & Ndibongo Traub (2014b) document how the financialization phenomenon is not only a product of foreign investments, but also very much a domestic one. Farmland holdings have, in general, evolved towards more and more concentration on the continent, as relatively wealthy urban-based individuals increase investment in land. It is most likely that this phenomenon of **“latifundition” will keep growing on par with urbanization, as medium and large investors keep acquiring land**, and will result in “exacerbating localized land scarcity, restrict the potential of smallholder-led development, and put unrealistic pressure on the non-farm economy to absorb Africa’s rapidly rising labour force” (2014b:1).

## **5.3 Social impacts and impacts on food security**

When looking at social and food security impacts of this financialization of food, it is essential to note from the outset that a greater distance between the point of production and consumption of food has contributed to **obscuring the links between financial actors and food system outcomes**, thus blurring our understanding of feedback loops between production processes and their social and ecological implications. The responsibility and accountability of investors in terms of the environmental and social externalities associated with the production of a given product becomes more difficult to establish (Clapp 2013).

### ***Social impacts of financialization of food: Threats to social fabric and local livelihoods***

#### ***Loss of land***

Despite much rhetoric on targeting marginal lands, investor interest often focuses on the **best land in terms of water availability and irrigation potential, soil fertility, proximity to markets, or availability of infrastructure** (Cotula 2012).

The FAO (2013a) highlights that 45 percent of land deals captured in the Land Matrix database concern cropland or crop-vegetation mosaics, which implies possible “intensive competition for cropland with local communities.” The combination of investment in land and in the agro-food supply chain by private institutional investors is spurring the “development of land markets” and “pushing farmers off the land” (Isakson 2014).

Numerous accounts and case studies document **loss of land and livelihoods and the ensuing forced displacement** of rural communities to make way for large land investments. In most cases, the literature documents how land deals took place without community consultation, with the local

population being misled on the project's impacts and promised significant returns. Often the areas where people are resettled do not offer the same farming potential as their area of origin. UNAC & Justiça Ambiental (2011) point to cases where rural communities in Mozambique were resettled to semi-arid lands not suitable for agriculture; in some instances, these displacements take place with flagrant abuses to human rights.<sup>60</sup>

#### **Box 11.: Impacts of land deals in Mozambique**

Evidence-based information on the effective impact that land deals have locally are hard to come by, as the government's involvement usually comes to a halt once a project has been approved. There is consequently no data on implementation progress. Deininger et al.'s (2011) field research in Sub-Saharan Africa, including Mozambique, showed that most projects have **at best provisional land use rights** and that "even in cases in which investments have been cancelled or not yet implemented to their projected scale, the land acquisition process and land clearance can have negative impacts on local communities and the environment" (FIAN 2010).

If we focus the analysis on the **forestry/timber sector**, for instance, Mozambique has attracted significant interest from overseas investors, especially by Nordic countries, which are eyeing the country's expansive opportunities (land, ideal biophysical conditions for tree growth, cheap labour) for forest plantations. UNAC and Justiça Ambiental (2011) have denounced the negative impacts that such plantations have on the local population and unequivocally link their expansion with land conflicts between local communities and investing companies. Some companies were found not to respect the boundaries of their concessions, invading communal areas (2011:37).<sup>61</sup>

In many of the interviewed communities (mostly in the northern part of the country) where resettlements took place, the resettled population lost the majority of its land used for the cultivation of food. The research shows how the land earmarked for industrial plantations is critical for local food production and how the country's food sovereignty will be threatened in the light of projected growth in plantations to 1.4 million hectares over the entire country, under the impulse of investors from Europe, the United States, Brazil, and South Africa.

#### **Misleading perception of employment creation**

Despite the fact that communities often advance job creation as their key motivation in welcoming large agro-investments, and despite the promises made by investors, **prospects of sustainable job creation in the recipient countries remain tenuous**. Workers are easily expelled should the operation prove unproductive (Daniel 2012), and often the contracts offered do not provide for any security, as workers are employed as contractors (Borras & Franco 2012). Also, Deininger et al. (2011) found that farmers are inevitably worse off as workers than as self-employed farmers.

#### **Box 12.: Corporate–community relations and job creation in the Tectona Forest of Zambezia projects**

Tectona Forest of Zambezia, a company dedicated to the planting of teak for reforestation (earmarked for carbon credit markets) and timber extraction (eucalyptus and pine) for the Indian market, signed several contracts to develop the plantation over three sites in 2009–10 (Land Matrix). In 2011, it was said to own 4,500 hectares of teak plantations (UNAC & Justiça Ambiental 2011) (the Land Matrix contract sizes indicates much larger areas).<sup>62</sup>

<sup>60</sup> See the case of Ethiopian communities from the Lower Omo, documented by the Oakland Institute 2013.

<sup>61</sup> These large-scale plantation projects include, for instance, the Malonda Tree Farm – Niassa, which has been accused by local community members of disrespecting the limits of its concessions and invading community areas, which is legally classified as land grab (2011:50), or the Chikwetii Forest of Niassa, in which Swedish, Dutch, American, and Mozambican investors have jointly invested US\$68 million up until 2018.

<sup>62</sup> As of the end of 2015, only the teak project in Namarroi, signed in 2009, was still running. The other two projects, in Mocuba and in Mone Messagulo, appeared to have been abandoned in 2014 for unspecified reasons (Land Matrix). According to the Land Matrix, investors in the Namarroi plantation include Green Resource AS (Norway), which in 2014

The company, at the time of this research, employed 1,465 people, of which 660 were employed on a temporary basis and 500 on a seasonal basis, with salaries ranging from Mt 1800.00 (US\$56.30 at the time) to Mt 4000.00 (US\$100 at the time).<sup>63</sup> Local community members in general reported that they had not benefited from the plantation, with the exception of the local elite (UNAC & Justiça Ambiental 2011).

### ***New labour relations: Deep changes to local agrarian structures and social fragmentation***

Very often, foreign investors into African land make use of local farming business to manage their investments. New labour relations are emerging at the farm level as a result of investors' inclination to externalize the risks of contracting operations. By entering into contractual agreements with farm entities that are very structured, **the status of African farmers ends up being profoundly changed, from that of a family farmer to that of an employee, manager, or contractor** (Oya 2012). This is an evident trend in South Africa, characterized by a highly commercialized agricultural sector (Ducastel & Anseeuw 2014); this trend will certainly be exacerbated across East Africa.

The social repercussions of these agrarian changes are poorly documented at this stage; suffice it to say that youth who cannot find work in the agricultural sector will be migrating to the cities and their shantytowns in search of employment. As summarized by De Schutter, "the result will be increasingly precarious livelihoods, rising poverty and a growing concentration of landholdings" (2011).

### ***Locking farmers into dependencies and indebtedness***

Beyond influencing production patterns, the financialization of food prompted by the Green Revolution has also oriented farmers towards purchasing GM (in some countries) and hybrid seeds, putting traditional production and the saving of indigenous seed varieties into jeopardy, but also locking farmers into having to use fertilizer for seeds to reach their full potential, as "Hybrid maize and synthetic fertiliser are part of an integrated Green Revolution package" (ACB 2015a:53). This further compounds soil degradation, to the extent that farmers argue that fertilizers are required to supplement any organic practices, as soils have been so depleted by the ongoing use of synthetic inputs.

### ***Box 13.: AFAP in Mozambique***

The implementation of AFAP in Mozambique offers a good illustration of how this programme has created new socio-economic dynamics and dependencies and is transforming local agrarian economies, with the result being that local farmers are more vulnerable rather than building their resilience and growing their businesses. The ACB (2015a) explains that the inclusion of banks in AFAP's operating parameters translates into mitigating risks for private companies, while small-scale farmers face increased risks in terms of repaying the debt. The imperative to repay the debt thus incurred will further lock them into purchasing fertilizer to maintain productivity (ACB 2015a). The heavy indebtedness of Indian farmers – who have resorted to committing suicide in the thousands because of their inability to repay debts incurred in purchasing synthetic inputs to farm – is emblematic of this vicious cycle created by the Green Revolution paradigm.<sup>64</sup>

### ***The impacts of financialization on regional and local food systems***

Ghosh (2009) argues that the 2007–08 financial crisis not only spurred speculative activities; in his view, the crisis also directly entrenched greater food insecurity by imposing constraints on fiscal policies and food imports on developing countries, causing exchange-rate devaluation through

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bought out GSFF (Green Resources 2014), Diversified International Timber Holdings (DITH) (USA) and the Diocese of Niassa (Mozambique).

<sup>63</sup> At the time, the national minimum wage was Mt2450.00 (US\$76.50) per month.

<sup>64</sup> See <http://timesofindia.indiatimes.com/india/Rs-69355-crores-of-debt-thats-killing-Punjab-farmers/articleshow/50954322.cms>.

capital flight and thereby reducing the ability of vulnerable groups to purchase food. In this sense, **the financialization of agricultural derivatives undermines the viability of small-scale agriculture to farm** in an economically viable manner, and may have direct negative repercussions on the long-term global food supply (Spratt 2013).

#### ***Food repatriation***

The FAO questions the assumption that investments are mostly focused on non-utilized land and underlines how this “has important implications for food security, especially if the crop is destined for exportation” (2013a:42), as is the case in most instances. Observers of land deals in Sub-Saharan Africa report that **investors generally insist on 100 percent food repatriation, with domestic markets being a marginal concern in most contracts** (Mbataru 2014). The food security argument advanced by the G8NA in advocating for greater investment by the private sector is also questioned by FIAN/TNI/IGO/FDCL (2014), which underline that food excesses produced will in all likelihood **be exported** rather than be retained locally, and that as a result of displacing subsistence-based agricultural systems, these commercial enterprises will further endanger local food security.

#### ***Adverse nutritional implications of promoting single crops***

The focus of AGRA on certain crops over others, which emulates the **strong bias of a national subsidy programme towards maize**, can **compound rather than alleviate nutritional issues** (Bezner Kerr 2012). From a nutritional perspective, maize is too prevalent in the diet of many poor rural households. Assuming the Green Revolution does lead to an increase in maize consumption in countries where the crop is critical to food security (e.g., Malawi, Zambia), such increments in a single crop will do little to alleviate micronutrient deficiencies, which are chronic among many African populations.

## 5.4 Environmental impacts

The negative environmental repercussions of the current agro-food system have been known for a while. There is extensive literature on the topic, starting with De Schutter’s (2014) summary of these impacts and how the agro-food system has “failed us.”

#### ***Impacts of synthetic inputs on soils and water***

The Green Revolution’s focus on incremental fertilizer application will compound the already disastrous state of soils in Africa. Even proponents of synthetic inputs caution about the side effects of excessive usage; when fertilizers are not properly used, they can promote nutrient pollution, lead to biological diversity loss, and cause health hazards (World Bank 2015). In many instances, the application of fertilizer fails entirely, as farmers are not adequately trained in their use and often resort to blanket applications (Global Soil Partnership 2013). The 2009 International Assessment of Agricultural Knowledge, Science and Technology for Development (IAASTD) synthesis report points to the many dangers associated with fertilizer use and advocates for the broad dissemination of agro-ecological practices.

Looking at the health of soils and water, the legacy of the first Green Revolution is twofold. On the one hand, the overuse of fertilizers, in combination with irrigation, has led to **excessive nutrient loading in soil and water systems**; on the other hand, given that the Green Revolution varieties were bred to be more efficient in nutrient uptake, and thus to convert more nutrients to grain, it has also resulted in **increasing nutrient depletion of the soil** (Bezner Kerr 2012:218).

The farming techniques used in the Green Revolution have been shown to have dire consequences on water resources, with **groundwater depletion, salinization, and water nitrification and waterlogging** being some of the problems. In a case documented by Makutsa (2010), the poison drift

from fertilizers and agricultural remedies used in the Kenya-based Dominion farm for rice cultivation drained into the swamp, causing the community's cattle and fowl to fall sick or die. In all cases, acquiring land is intimately linked to gaining access to water: **land and water grabbing** are thus inseparable (Woodhouse 2012). In Mozambique, a large portion of land that is sold or leased to foreign investors is close to rivers, which communities rely on as their main water resources. In some instances, existing projects have been known to put up gates with a guard to prevent locals from accessing water bodies (UNAC & Justiça Ambiental 2011:27).

***Industrial agriculture, a climate forcer***

Industrial models of agriculture are fuelled by high levels of synthetic inputs, machinery, and vegetation clearance that act as **climate forcers**, the effects of which have been demonstrably felt in Sub-Saharan Africa for several years now (IPCC 2013). In Mozambique, disasters such as the 2000 extreme floods and recurrent extreme events weaken the response capacity of local people. A World Bank (2010) study estimated that the impact of climate change on economic growth would cause annual losses in the region of US\$400 million per year up to 2050.

Natural resources such as water, soil nutrients, and biodiversity are not taken into account when land deals are negotiated. The **harm caused to local ecosystems bears directly on food security**; a degraded environment will fail to produce healthy food not only for present generations, but also for future ones.



## 6. Conclusion: Alternatives to the financialization of food for a life-enhancing agriculture

### 6.1 Principles of life-enhancing agriculture

This section explores key principles that could constitute the stumbling blocks of life-enhancing food systems and be embraced to shape action. The key tenets of what constitutes **an economy of life** are embedded in **theological principles** and hold in balance efforts to satisfy human needs and the **impetus of caring for nature** – which is life or a source of life and livelihoods. These core principles are as follows:

- Market fundamentalism, profit-driven production, overconsumption, and a growth model that is not respectful of planetary boundaries are irreconcilable with life-enhancing agriculture because of their adverse socio-economic and ecological impacts;
- The good life lies in communion, mutuality, reciprocity, justice, and compassion;
- Land, water, and seed are life;
- Agriculture ought to contribute to the eradication of hunger and poverty, wealth redistribution, ecologically respectful production, consumption, and distribution, as well as healthy communities.

Based on this broad framework, key principles shaping agricultural systems have been identified and are suggested below.

#### *Agriculture that puts farmers first*

It is widely acknowledged that – given the preponderance of on-farm investments by farmers themselves worldwide (see section 3) – **small farmers will be the ones helping to meet the global “0 hunger” target**. Grassroots organizations working closely with small farmers argue that the only worthwhile investment is to invest in farmers rather than in their land (or taking away their land). Central to these movements’ programmes are two interrelated concepts: **food sovereignty and land sovereignty** (Hall 2014). This call for supporting farmers essentially entails **redirecting local (public sector) resources towards (small-scale) agriculture**, thus downplaying expectations around exogenous sources.

The fact that public investment in rural infrastructure and support for land and water rights improve agricultural productivity in a way that benefits local farmers has been well demonstrated (De Schutter 2011). The FAO’s *State of Food and Agriculture* (2012) report underlines that farmers will invest adequately only if the **public sector fosters an appropriate climate for agricultural investment**. The findings of this research advocate for public action to be steered towards securing land tenure rights, improving rural infrastructure and public services, providing institutional support to establish cooperatives, setting up social safety nets, etc. In many respects, this empirical evidence reinforces the argument that solutions can be found locally if the right frameworks are adopted, and that localizing action is the best strategy (FAO, WFP & IFAD 2015).

#### *Food systems rooted in local farms: Localization*

In pursuing this imperative to benefit small-scale farming structures, a principle that emerges is the need to focus on investments that are directed towards reinforcing local economies, as opposed to extorting them towards global markets.

Localization is a key aspect put forward by the African agro-ecological movement (Galvis 2015). Among the range of recommendations advanced by the African Civil Society Statement in support of agroecology is the need to “focus on the localized development of sustainable food systems and not ‘value chains’, which capture and hold hostage many actors as only a chain can do” (2015).

The sustainability of local-scale food systems resides in the fact that they are characterized by **tight feedback loops** linking consumers, producers, and ecological effects (Sundkvist, Milestad & Jansson, 2005), which stands in harsh contrast to the distancing between food production and trade inherent to large scale agribusiness investments (Clapp 2013).

Localization is also a central tenet of food sovereignty. According to the Alliance for Food Sovereignty in Africa (AFSA) (2014), localization should entail **reshaping food systems in developing countries** so that these produce only **commercial crops that cannot be produced elsewhere** (in other words, tropical crops such as coffee and bananas), which gives them a comparative advantage on global markets and can be used to inject the required foreign capital into national economies. Under this philosophy, other crops that can also be grown in temperate countries (beans, flowers, animal feed, etc.) should no longer be encouraged, as this **detracts local farmers from subsistence farming and their local economies**. It would further entail that the aforementioned commercial crops, if they are to be grown, should follow the principle of **Fair Trade Miles** to ensure that these reinforce local economies without compromising the environment.

#### *An agriculture that provides a nutritious and balanced diet*

Diets in poor Sub-Saharan Africa households are typically based on plant-source foods that consist of high shares of starchy staples; they usually contain few vegetables or fruits and little or no animal protein. Because of the limited diversity of their diets, poor rural populations in East Africa suffer from **micronutrient deficiencies** (Ecker, Weinberger & Qaom 2010). But this hidden hunger is not only attributable to the nature of the crops grown and consumed. It is also very clearly related to the consequences of modern farming methods, which have led to the **draining of nutrients in soils and** consequently in the food grown. As we can see from past green revolutions and in the Green Revolution unfolding in Africa today, **nutrient output is not held as an explicit goal of food production** (Welch & Graham 1999). A growing body of literature points to the fact that “cereals, rice in particular, [and] the pervasive promotion of single crops” leads to “displac[ing] traditional micronutrient-rich crops” (Welch & Graham 1999). Such was the case in Africa, where the focus on maize has led to the detriment of other indigenous crops (ACB 2015d).

Henceforth, another important dimension of what would constitute life-enhancing agriculture would be an agriculture that enhances local diets and remedies the much-described deficiency in fruit and vegetables and in small animal husbandry (bioavailable vitamin A, iron, and zinc intakes). Ecker, Weinberger & Qaom’s (2010) research shows that **home gardens** have a considerable positive effect on household vitamin A intakes, as households with a home garden consume more vegetables and fruits. This is an important consideration given the bias towards single monoculture crops such as maize (and henceforth the mono-diets), that go hand in hand with industrial agricultural models.

#### *An agriculture that enhances mental and spiritual health*

The literature shows evidence of a significant relationship between unhealthy dietary patterns and poorer **mental health** in children and adolescents (O’Neil et al. 2014). Much can be said about food systems that put health and well-being at the heart of the system (Bublitz et al. 2011).

Taking this dimension a step further, life-enhancing food resonates with **life-giving food**, thus introducing the notion of our relationship to food and how it should be revered. Ancient Vedic tradition, for instance, paid particular attention to food as the source of mental and spiritual health. As stated by Usha (n.d.), “people realized the significance of the perceivable and subtle properties of food and adopt[ed] the disciplines of eating pure, properly cleaned and cooked, naturally healthy foods with the feeling of consecration and sanctification.”<sup>65</sup> In our discussion about the financialization of food, much was said about the **abstraction manifesting between market forces and foodstuffs** (Clapp 2013), underlining the risk of forgetting the function of food as life-sustaining and thereby **desanctifying food**. Life-enhancing agriculture can therefore not be synonymous with decoupling food production from food’s life-giving properties.

### *Intensifying agriculture in a sustainable manner*

There is abundant literature discussing how food systems should evolve in the wake of the secular trends of exponential population growth and global diet transitions,<sup>66</sup> combined with declining resources and competition for land, and leading to unprecedented pressure on global and local food systems. One of the key concepts that have emerged over the past decade to address this food crisis is that of sustainable intensification.

Sustainable intensification can be described as “producing more food from the same amount of land but with less impact on the environment” (Godfray 2015). The notion of intensification is rooted in **producing more food within the same footprint** (the idea of extensification is generally rejected as unsustainable). It has, however, been decried by civil society as **pushing for the adoption of various forms of “high-input or hi-tech agriculture,”** as it implies high-density livestock produced in feedlots, greater use of synthetic fertilizer and pesticides, genetic engineering (Collins & Chandrasekaran 2012), and biofortification.<sup>67</sup> Also, from an environmental sustainability perspective, it can be intuited that the notion of life-enhancing agriculture would reject a production system that is simply “environmentally benign” – as implied by the sustainable intensification approach (Godfray 2015) – as insufficient. Life-enhancing farming must be life-giving; rather than simply not harming nature, it needs to be **regenerative**.

### *Responsible investment mechanisms in land and agriculture*

These principles enunciated as pillars of life-enhancing agriculture naturally call for agricultural investments that put local farmers first, adhere to ethical principles, and are protective of ecosystems. Several standards guiding responsible investments (RI) in land and agricultural investments have been developed, especially over the past five years (FAO 2015a). These standards are in response to growing civic and governmental concerns about the potentially adverse consequences of new agricultural investments (Cotula & Blackmore 2014), especially in light of the fact that recipient countries tend to lack the safeguards required to control these investments.

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<sup>65</sup> “Purity of food helps in purifying the inner self. Purification of the inner self and hence of the mind and intellect, accelerates elimination of illusions and ignorance. This in turn, paves the way for salvation of the soul.” (Scripture translated, Usha n.d.)

<sup>66</sup> This notion refers to the changes in dietary requirements of wealthier populations, which tend to be characterized by a greater demand for meat.

<sup>67</sup> The World Health Organization (WHO) (2015) defines biofortification as “the practice of deliberately increasing the content of an essential micronutrient, i.e., vitamins and minerals (including trace elements) in a food, so as to improve the nutritional quality of the food supply and provide a public health benefit with minimal risk to health.” Biofortification is very much on the agenda of the African Green Revolution. See the Harvest Plus map of biofortified crops grown in the world: [http://www.harvestplus.org/sites/default/files/Crops%20Map%20Infographic\\_0.jpg](http://www.harvestplus.org/sites/default/files/Crops%20Map%20Infographic_0.jpg).

International organizations have been at the forefront in developing these RI standards, but private players have also come to the fore with their own sets of principles.<sup>68</sup> As of 2014, a total of 12 such international RI standards had been developed, including four by the UN and six civil society–related initiatives (ECB Capital 2014). For the purpose of this report, only the principles developed by UN bodies are listed. These include the following:

- The FAO Voluntary Guidelines for the Responsible Governance of Tenure of Land, Fisheries, and Forests in the Context of National Food Security (VGGT), which were approved in 2012 by the Committee on World Food Security (CFS).<sup>69</sup>
- The UN Global Compact Food & Agriculture Business Principles (FABs) launched by the UN Global Compact in 2012, with the aim of promoting a “more responsible and ethical business conduct in the private sector based on the 10 UNGC Principles.” These principles are endorsed by UN bodies, but the implicit exclusion of commodity traders and private equity funds that are not members of the UNGC weakens the FABs’ influence.
- The Principles for Responsible Agricultural Investment that Respects Rights, Livelihoods and Resources (PRAI), which were initiated in 2010 by the World Bank, FAO, IFAD, and UNCTAD.<sup>70</sup> Although backed by international organizations and the G7 countries, these principles were rejected by the CFS. The PRAI have been strongly criticized for the top-down approach adopted in defining these principles and the fact that they seem to legitimize land acquisition by corporations and sovereign wealth funds (EBG Capital 2014). These principles are, however, endorsed and used by several countries, and their influence could still grow.
- Following its rejection of the PRAI in 2010, the CFS instead opted to develop the Principles for Responsible Investments in Agriculture and Food Systems (CFS-RAI), which it approved in October 2014. The CFS process has been very inclusive to ensure the buy-in of all stakeholders. These principles “address all types of investment in agriculture and food systems – public, private, large, small – and in the production and processing spheres” (CFS 2014).

### *Are these mechanisms sufficient?*

Several caveats are noticeable from the diversity of regulatory frameworks guiding agricultural investments. First, it appears that a rift has emerged between various sets of actors. The World Bank, the United Nations Conference on Trade and Development (UNCTAD), and the private sector are possibly inclined to support the PRAI principles, while the FAO/CFS, NGO, and CSO sectors are leaning towards the CFS-RAI, thus diluting the efforts to develop universally agreeable investment principles (EBG Capital 2014). The CFS-RAI principles, however, seem to have gained the broadest-based legitimacy, as they represent the “first global consensus on defining how investment in agriculture and food systems can benefit those who need it most” (CFS 2014). Nonetheless, the downside of some of the CFS principles is that they might be too generic to have a real impact on the ground (EBG Capital 2014), and that these principles remain voluntary and non-binding.

Schanzenbaecher & Allen (2015) conducted an extensive survey relating to RI practices among several asset managers that purchased agricultural assets, mostly in Africa. Although all investors aimed to create positive impacts for local stakeholders, respondents reported that the

<sup>68</sup> These include the Sustainable Agriculture Initiative (SAI) platform, created in 2002 by Nestlé, Unilever, and Danone, and count over 50 food industry members; and the Principles for Responsible Investment in Farmland (known as the Farmland Principles), launched by a small group of pension funds in 2011.

<sup>69</sup> The CFS is the United Nations body responsible for food security matters.

<sup>70</sup> “The PRAI are designed to address the risk of large-scale investments along the agricultural value chain which may result in displacement or disadvantage local communities, damage the environment and even saddle countries with poor-performing farm sectors requiring subsidy” (EBG Capital 2014).

implementation of these RI guidelines on the ground proved challenging. The authors contend that at best, these guidelines offer a checklist against which investors compare their own internal environmental, social & governance (ESG) monitoring criteria. Importantly, securing “free, prior and informed consent” (FPIC) seemed to be one of the most challenging parts of the investment process, with only a few respondents having conducted a structured FPIC process (2015:6).

GRAIN (2016) also brings attention to the shortcomings of these RI principles, which have increasingly been used by investors to “label” large land acquisitions; even though these deals are “more organised,” they should still be construed as land grabs. Furthermore, if discussions on RIs have been welcome for bringing attention to land tenure issues globally, the strengthening of regulatory processes nonetheless aims at **formalising land markets and titles**, which will in turn lead to further concentration of land (GRAIN 2016).

These findings from the field reveal how the above-described regulatory frameworks, by virtue of their voluntary nature, may remain insufficient to ensure adherence to critical aspects of ethical agricultural investments, and to uphold the principles of life-enhancing agriculture. This begs the question of what levers could create the right conditions to trigger a shift from life-spoiling to life-enhancing agriculture.

## 6.2 Levers for change

In light of all these shortcomings in regulating RIs at the national level, levers for actioning RI would thus very much find their roots at a domestic level, but also on the consumer side, with much leverage being potentially gained from enticing various financial actors to invest responsibly. It can indeed be contended that these voluntary principles constitute a valuable starting point from which actors can decide to base compulsory practices. Levers for change towards life-enhancing agriculture are discussed in this section.

### *The inclusive model*

In an attempt to define what would constitute an ideal investment approach, analysts and international organizations have come forward with the **“inclusive model”<sup>71</sup> concept, which essentially involves ensuring strong benefits and ownership of agricultural investments by local farmers**. To this end, agricultural investments should be geared towards “supply chain relationships and ownership of shares by local farmers, which would enable local people to have greater ‘ownership’ and ‘voice’” (Buxton, Campanale & Cotula 2012:4).

Such inclusiveness entails, for instance, **giving shares from the investing company to local farmers** (or the association for farmers) involved in a given **outgrower scheme**. This model gives farmers a say in the **management of the company** and increases their sense of **ownership**. Another way farmers can benefit from these investments is by **facilitating their access to global markets through (organic) certification**<sup>72</sup> (FAO 2013c). More inclusiveness can also be ensured by starting with a relatively small investment (as opposed to large land acquisition) in the first place; this small nucleus

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<sup>71</sup> We are aware that the concept of inclusiveness in this context can be contentious, as it is often used as a smokescreen by corporate entities to supposedly involve communities affected by agribusiness, mining, and other developments. That is why we are very clear on what would constitute an acceptable inclusive model, as per the definition proposed further on, which is anchored in the notion of clear and unambiguous beneficiation.

<sup>72</sup> See the example of the ITFC project in Ghana, which helped its outgrowers become certified to the European Union’s organic agriculture standard and the GlobalGAP standard, thus giving farmers access to premium markets for their products (FAO 2013c).

estate can then progressively expand through out-grower arrangements with surrounding smallholders (World Bank 2013b), thus allowing the investment to grow organically by including local farmers.

### ***Tools for responsible investments***

Below are some tools extracted from the literature on RIs, which can prove useful to guide and inform local partners on how such investments should be conducted on the ground.

- The FAO-OECD (2015b) has developed practical Guidance for Responsible Agricultural Supply Chains.<sup>73</sup>
- Buxton, Campanale & Cotula (2012:4) propose a useful approach geared to ensuring that financial investments in the agricultural sector effectively benefit local farmers. Their **ownership, voice, risk and return framework** can be a valuable conceptual framework guiding investments.
- Cotula and Blackmore's (2014) research on **pressure points in investment chains** spells out how consumers can influence investments. They identify "sites along the investment chain where public action can influence the behaviour of actors, or the nature of relations between those actors, in order to implement the Voluntary Guidelines" (2014:1). Their work offers information on what constitutes public action pressure points in midstream relations between the enterprise, the host government, and affected communities; upstream relations within the corporate structure; and midstream and upstream relations with business partners.
- The global farmer movement **La Via Campesina** has developed good governance guidelines for the private sector to regulate itself, so as to enable the flourishing of family-based farming, as opposed to "corporate-dominated industrial agriculture" (AFSA 2014).

### ***The responsible financialization of food?***

Financial investment flows tend to concentrate in ventures where **fast profit can be made**, doping the **sections of the food value chain which best serve corporate interests**, whereas these investments are critically missing where they are most direly needed – e.g., in the farmers themselves. In other words, the critical issue here is whether "investments help bridge the 'mismatch' between finance and its demand for short-term profits and the long-term credit needs of agriculture" (Martin 2015:290). After having explored mechanisms for RI agriculture, their limitations and levers for change, a similar analytical lens can be adopted to identify possible alternative financing mechanisms in the agri-food sector.

### ***Patient capital***

The typical profile of patient investors is either non-profit or public-sector entities (governments, development banks, or sovereign wealth funds), with some actors from the private sectors, such as "impact" or "social" investors, which look at longer time frames for returns on their investments (Liu 2013, cited in Martin 2015).

AgDevCo is one such impact investor, portraying itself as a pioneer in raising patient capital, which it describes as follows: "Patient capital is long-term capital that seeks a social as well as a financial return. It has a high tolerance for risk and is willing to accept positive but less than fully commercial returns in exchange for greater development impact.... Ultimately, patient capital is about demonstrating and proving business models which can subsequently get to scale by attracting follow

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<sup>73</sup> See <http://www.fao.org/economic/est/issues/investments/fao-oecd-guidance/en/#.VmP84aTDbMM>.

on private investment” (AgDevCo 2015).<sup>74</sup> But Martin (2015) questions whether patient capital effectively classifies as investment, as it often takes the form of pilot projects rather than investments per se, and generally proves to not be profitable and is subsidized by donor money. It is thus unlikely that private investors will show interest in investments offering little prospect of profit.

### ***Blended capital***

A recent model of investments, which appears to offer synergetic relations between development finance and philanthropic finance to entice private investors and is receiving attention, is emerging in the agricultural landscape and may play an important role in mobilizing investors’ interests in the sector. This financial model is called blended finance, and is defined by the World Economic Forum (WEF) and the OECD as “the strategic use of development finance and philanthropic funds to mobilize private capital flows to emerging and frontier markets” (WEF & OECD 2015:3).

The newly established Lending for African Farming Company (LAFCo) is one such organization operating in Sub-Saharan Africa; it is the blended product of capital from Root Capital – a lender normally known to support export crops, Germany’s KfW Development Bank, and the aforementioned agriculture impact investor AgDevCo. The US\$15 million facility is to provide **working capital loans to small and mid-sized businesses that supply and buy from Africa’s smallholder farmers**. The company focuses on lending activities across Sub-Saharan Africa, with a particular focus on Ghana, Kenya, Malawi, Senegal, Tanzania, Uganda, and Zambia. LAFCo was developed in collaboration with the Grow Africa Finance Working Group (Root Capital 2015), which shows the ramifications between such blended investments and the international partnerships supporting the Green Revolution. The philanthropic focus (and impact) on this type of finance still needs to be proven in the long term.

The financial tools flagged here, although moving in the right direction, propose only partial solutions towards ensuring the responsible financialization of food. Going a step further, actors can mobilize and steer financial investments in the right direction, or ultimately quell them, notably through divestments.

### ***Divestments***

In the wake of the 2010–11 food volatility crisis, several civil society–based movements became actively engaged in pressuring private investors to divest of funds seen as driving the food crisis.

Such was the case of a coalition of civil society organizations that played an influential role in the withdrawal of European banks from investing in agricultural commodities. Oxfam France (2013) put heavy pressure on French banks and led several of them to pull out of commodity speculation in early 2013. The same happened in Germany under the pressure of Foodwatch (2011). By mid-2013, the WDM reported that some 11 European banks had pulled out of financial investment in agricultural commodities<sup>75</sup> (Oxfam 2013). Such campaigns can yield real impacts in terms of where investment money is channelled and should be considered as important levers for change in the context of the financialization of food.

Finally, reports on the limits of food financialization are starting to emerge in the literature, with some research showing that some of **the financial products linked to the sector may not prove as profitable as originally thought** (i.e., CIFs are not producing returns except for the managers [Martin

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<sup>74</sup> AgDevCo specifies that in the African agriculture sector, patient capital offers bridging finance “to support the growth of early-stage SME businesses that are too large for microfinance but too small for private equity” (the famous “missing middle”). “Patient capital is also needed to part-fund the capital costs of irrigation and related agriculture-supporting infrastructure, such as electricity connections and feeder roads.”

<sup>75</sup> <http://www.wdm.org.uk/category/tags/food-speculation>

2015]). Also, large-scale farming operations are proving **uneconomical past a certain scale**, as the costs required to run the operations (inputs, machinery, etc.) exceed the value of the commodities. This implies that the only rational for upscaling such operations is to respond to the demands of finance, which require those economies of scale (10,000 to 20,000 hectares) to attract capital and generate profit (Visser 2015).

### *Summary on potential levers for action for responsible investments and financing*

Private-sector operators can play an important role by doing the following:

- Integrating traditional ESG concerns into investment decision making (Buxton, Campanale & Cotula 2012) and by making voluntary RI guidelines compulsory for the entities they invest in (suppliers, etc.);
- Domestically ensuring compliance with ESG regulations by making the commissioning of independent social impact assessment and environmental impact assessments compulsory;<sup>76</sup>
- Creating incentives for more inclusive investment models that involve local farmers;
- Exploring avenues to co-invest in patient or blended capital ventures that typically focus on critical infrastructure/measures that support farmers' agricultural ventures;
- Fostering/investing in divestment campaigns.

## 6.3 Agricultural approaches aligned to life-enhancing principles

*From a "Food from Nowhere" regime to a "Food from Somewhere regime."* (Campbell 2012:316)

In this section, we highlight farming systems that have proven to adhere to the principles enunciated above in an attempt to define life-enhancing agriculture, and more precisely to improve biological efficiency and preserve diversity so that the "agroecosystems thus nurtured can promote their own soil fertility, productivity and crop protection."<sup>77</sup> Approaches to life-enhancing agriculture typically include permaculture, agro-ecology, and biodynamic farming. These approaches all subscribe to principles of sustainable agriculture by preserving and using living organisms and by mimicking the structure and function of natural ecosystems. However, they differ in their scope of application and in the techniques used. These approaches are by no means prescriptive and are solely aimed at illustrating what is feasible on the ground.<sup>78</sup> Underlying this is the need to assess the extent to which these practices could be scaled up.

### **Agro-ecology**

The UN rapporteur for food security put forward agro-ecology as a critical alternative to industrial farming. Agroecology (De Schutter 2011) refers to a way of farming that places **great emphasis on sustainability**. Altieri (2012) defined the practice as "diversified agricultural systems that contribute to local and national food and livelihood security," which rests on "ingenious systems and technologies of landscape, land, and water resource management and conservation." Such a system allows for "high levels of biodiversity" critical to ecosystem services and for "resiliency and robustness to cope with disturbance and change (human and environmental)." Under this regime,

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<sup>76</sup> In Kenya, for instance, the Environmental Act (EMCA) requires of an investor that an EIA be conducted, but these are conducted by the applicant and not independently verified, which opens the door for irreversible environmental damage to be allowed (Makutsa 2010).

<sup>77</sup> <http://wanderingfarmers.com/farming/sustainable-agriculture/>

<sup>78</sup> Another interesting farming movement worth mentioning, and which complements these fundamental approaches, includes Farm Hack, defined as "a community of farmers and growers developing appropriate tools for small scale ecological farming." See <http://landworkersalliance.org.uk/farmhack>.



“traditional knowledge systems and farmers’ innovations and technologies” play a key role, and the system is “regulated by strong cultural values and collective forms of social organization including customary institutions” (2012:3).<sup>79</sup> The fact that agro-ecology embraces and allows for the production of food that is environmentally sound, socially equitable, and rooted in the respect of traditional peasant tradition **intrinsically makes it a superior and more life-enhancing way of producing food.**

Pretty and Hine (2010) undertook an extensive meta study of 208 agro-ecological projects across 52 countries, including 100 in Africa.<sup>80</sup> They underline how efficient these methods are proving to be, especially for small farmers, as in 90 percent of cases, the farms were less than 2 hectares; but this doesn’t mean that such agro-ecological practices cannot be replicated at scale, as illustrated by the case of Cuba.<sup>81</sup>

The sustainable intensification opportunities presented by agro-ecology and other low-external input forms of agriculture offer proven alternatives (Pretty 1995; Pretty 2003). By adopting agroecological practices, farmers can stop using chemical fertilizers without reducing yields. This was the conclusion supported by the 2009 IAASTD – a three-year intergovernmental process involving over 400 scientists (IAASTD 2009).

### ***Permaculture***

Permaculture is a philosophy and an ethical design system developed by David Holmgren and Bill Mollison in the late 1970s. Mollison defines permaculture as “the study of the design of those sustainable or enduring systems that support human society, both agricultural & intellectual, traditional & scientific, architectural, financial & legal. It is the study of integrated systems, for the purpose of better design & application of such systems” (Holmgren 2004).

The approach is based on designing landscapes according to functional zones, which “mimic the patterns and relationships found in nature, while yielding an abundance of food, fibre and energy for provision of local needs” (Holmgren 2004).

### ***Biodynamic agriculture***

Taking the holistic approach to farming deeper, practitioners may want to consider biodynamics as a paradigm that is even closer to life-enhancing agriculture and worth supporting.

Biodynamics is a holistic, ecological and ethical approach to farming, gardening, food and nutrition .... Biodynamic farmers strive to create a diversified, balanced farm ecosystem that generates health and fertility as much as possible from within the farm itself. Preparations made from fermented manure, minerals and herbs are used to help restore and harmonize the vital life forces of the farm and to enhance the nutrition, quality and flavor of the food being raised. Biodynamic practitioners also recognize and strive to work in cooperation with the subtle influences of the wider cosmos on soil, plant and animal health.<sup>82</sup>

As implied by this definition, biodynamic farming is very much imbued with a **regenerative imperative**, as all the practices regulating this approach focus on **restoring soils**. What is also worth

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<sup>79</sup> These practices include inter-cropping, crop rotation, deep mulching, the use of insect traps and medicinal plants, companion planting, production and use of organic fertilizers and pesticides, vermiculture, and composting (Rosset et al. 2011; Altieri 2012).

<sup>80</sup> The following interventions have led to significant yield gains and/or additional revenue streams for farmers: i) intensification of a single component of the farm system; ii) addition of a new productive element; iii) better use of nature (water) to increase productivity; and iv) introduction of new regenerative elements.

<sup>81</sup> For a captivating illustration on agroecology deployed on a national scale, see Rosset et al. (2011).

<sup>82</sup> See <https://www.biodynamics.com/what-is-biodynamics>.

noting about biodynamic farming is that it goes beyond just being a “**holistic agricultural system, but (it is) also a potent movement for new thinking and practices in all aspects of life** connected to food and agriculture.”<sup>83</sup> The movement, for instance, gave rise to community supported agriculture (CSA), which seeks to re-establish critical linkages between those who produce food and those who consume it, thus re-embedding agriculture in our societies.

## 6.4 Further research

What comes out of this research paper is that although some levers for action are identifiable and some agricultural practices (agro-ecology, biodynamic) tend to lean towards life-enhancing food production, an element that is critically missing in our attempt to picture alternative models of agriculture is a deep understanding of how local food systems function. Without a clear grasp of what local and indigenous communities are doing as actors of food systems in a given context, it will remain difficult to define and put into practice viable alternatives for African food systems. This certainly calls for further research.

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<sup>83</sup> <https://www.biodynamics.com/what-is-biodynamics>

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**PART TWO**  
**The Financialization of Food in Asia**  
**and the Philippines:**  
**The Role of the World Bank**

*Rosario Guzman and Arnold Padilla*

**Executive Summary**

1. The last three decades have witnessed remarkable growth in the sale and purchase of financial derivatives linked to agricultural commodities by banks, agricultural trading companies, and investment funds. Moreover, since 2008, purchases or long-term leases of large swathes of land by investors have been taking place at a controversial scale and pace. This report contributes to the growing literature on the phenomenon of financialization of agriculture and how it is shaping global food and agricultural systems, examining in particular the role of the World Bank and other international financial institutions like the Asian Development Bank (ADB) in facilitating financial flows in the rural sector. It discusses the impacts of financialization of agriculture in Asia, narrowing in on the case of the Philippines, a country where agricultural activity remains significant and where the World Bank and ADB continue to have an important presence. The key findings are summarized in the succeeding paragraphs.
2. An important development internationally is the increasing importance of finance capital over production capital. Finance capital is considered a new mode of profit accumulation for investors as the global economy tries to recover from the crisis of the capitalist system. Termed “financialization,” the phenomenon is described as “the tendency for profit making in the economy to occur increasingly through financial channels rather than through productive activities” (Krippner, as cited in Fairbairn 2014). Agriculture has not escaped this phenomenon.
3. Over the last two decades, foreign direct investment (FDI) in agriculture has been increasing. The period immediately following the global food crisis, i.e., 2008–09, saw the largest FDI inflow into agriculture, amounting to US\$25 billion or almost double the level from five years earlier (fDi Markets 2016). Private investment in agriculture is now greater than official development assistance (IFAD 2014).
4. Among institutional investors, farmland, food, and agriculture are an emerging asset class (Chen, Wilson, Larsen & Dahl 2013). There are currently over 240 investment funds involved in the sector, managing US\$45 billion in assets (Valoral Advisors 2015). This figure is bigger than the combined estimates of FDI in agriculture. The growing appeal of agriculture to investors points more categorically to the increasing financialization of the sector. Institutional investors are now penetrating the sector to improve diversification, provide an inflation hedge, and increase their profits. In the prevailing economic climate of low interest rates, land and food have become vehicles for higher returns. The inclination of institutional investors towards land is due to the two distinct roles of land being a productive asset that can moonlight as a financial asset. Land can create income from production and, at the same time, create wealth through passive appreciation.

5. The notable investment players in agriculture include banks, insurance companies, pensions, hedge funds, investment advisors, endowments, and mutual funds. These financial actors pool money to purchase securities, real assets, and other financial assets for speculative more than for productive purposes.
6. Concurrently, both source and host governments have officially participated in the land rush by setting up funds and amenities with the purpose of assisting private investors in the food and agriculture sector. Some governments have established development funds such as subsidies, soft loans, guarantees, and insurance to fund state-owned enterprises or private sector companies. Governments have also created institutions such as export credit agencies in investor countries and investment promotion agencies in host countries. These also provide informational, technical, and bureaucratic support to the private sector.
7. One significant trend is the proliferation of public-private partnerships (PPPs) with the aim of attracting investments in agricultural infrastructure and services. Today, such partnerships may be found in at least five intervention areas: farm-to-market roads, wholesale markets, water for irrigation, seed technology, agriculture research and innovation, and value chain development (Guzman 2015). PPPs serve as a tool for development cooperation, conferring upon international financial institutions and donor agencies a substantial role in promoting private investments in agricultural commodities, firms, and land. This conveniently embeds private agricultural investment in the framework of development and enables the more systematic flow of public resources for private profit.
8. The World Bank is at the forefront of the increasing financialization of global agriculture. Its influential position may be observed in several pathways. First, it has included PPPs and private-sector investment in its agricultural aid strategies. Second, its Agricultural Action Plan for the period 2013 to 2015 specifically prioritizes PPPs and focuses on the private sector, pushes for the opening up and integration of domestic markets into global value chains, and promotes index-based climate risk insurance that is no different from other financial derivatives. Third, it has increased loans, grants, equity investments, and guarantees, mostly to facilitate foreign land deals. Fourth, its principal agencies, like the International Finance Corporation (IFC), Facility for Investment Climate Advisory Services, Multilateral Investment Guarantee Agency, and others, are increasing lending, improving investor climate, and offering political risk insurance to investors in agriculture. Fifth, its Enabling the Business of Agriculture programme gives high points to countries that create the most favourable climate for corporations, thus creating pressure for developing countries to implement reforms that will further ease business operations in agriculture to pull in more private, including foreign, investments in the sector.
9. In particular, IFC investment has been increasingly channelled through financial intermediaries or third-party financial entities. These banks, insurance companies, microfinance institutions, and private equity funds are now the largest beneficiaries of World Bank investment through the IFC (Bretton Woods Project 2014). The much bigger surge in IFC investments, including those directed through financial intermediaries, compared to other World Bank agencies such as the International Bank for Reconstruction and Development and the International Development Association, exposes the greater focus of the World Bank on promoting the role of the private sector in rural development. It is also reflective of the World Bank's continuing emphasis on financial deepening – a key component of financialization (Bretton Woods Project 2014).

10. Intensified investor and donor interest in food commodities, land, natural resources, and agriculture production has given rise to unprecedented speculation in food and agriculture, the subsequent land rush, and hikes in land and food prices. The phenomenon of financialization of agriculture has become a major cause of concern for advocates of food sovereignty and farmers' welfare because it heightens the disconnection between finance and production, thereby placing food security at great risk. This has tremendous implications on rural livelihoods and the rural economy as a whole.
11. World Bank involvement in agriculture is replete with cases of land grabbing, destruction of ecosystems, displacement of indigenous communities, and human rights violations. Out of 21 formal complaints filed by local communities against World Bank investments and projects in agriculture during the period 2008 to 2012, 12 were in Asia Pacific, five in Africa, and four in Latin America (Oxfam 2012). In this context, the World Bank in 2010 pressed for a semblance of regulation by coming up with Principles for Responsible Agricultural Investment that Respect Rights, Livelihoods, and Resources. These principles were highly criticized – not least because of their voluntary nature – and rejected by civil society organizations for being “woefully inadequate.”<sup>84</sup>
12. In Asia, which is an important destination of agricultural investment and where land transactions also pose a major development problem, the World Bank and the ADB are smoothing financing in the agricultural sector.
13. A recent development worth watching is the rise of so-called climate risk insurance, initiated by the World Bank. Banking on Asia's high vulnerability to climate-related disasters, the World Bank and the ADB are promoting the idea of a “climate-smart agriculture.”<sup>85</sup> They emphasize that adaptation measures to climate change in Asia and the Pacific should take account of changes in agricultural practices and water management towards climate resilience. These will require attention to risk-sharing and risk-reducing investments. Such investments include technological fixes, risk management, financial market innovations, weather-based crop insurance, and broad-based social safety nets.
14. More specifically, the World Bank's major initiative is the Global Index Insurance Facility, which is housed within the IFC. It offers insurance to farmers vulnerable to catastrophic weather and gives payouts to policy-holding farmers whenever environmental measures exceed specified thresholds. On the other hand, the ADB has come up with the Climate Change Fund, which engages insurance and reinsurance industries. Their products include micro-insurance, weather and crop insurance, and other mechanisms, like risk pooling and disaster-related bonds. Such climate insurance schemes may, however, make farmers less – rather than more – resilient to climate change. A Food First study shows that farmers who access new forms of insurance tend towards monocropping, exhibit riskier behaviour, and borrow more to buy chemical inputs and so-called improved seed varieties (Holt-Gimenez, Williams & Hachmyer 2015).
15. As a key strategy for rural development, the ADB promotes contract farming to enable smallholder farmers to access export markets. One of the largest loan programmes of the ADB in the Philippines is directed towards agrarian reform communities (ARCs), which are

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<sup>84</sup> PAN Asia Pacific (PANAP), for instance, identified three key weaknesses of the said set of principles: (1) It is premised on the current anti-human rights trade and investment regime; (2) It promotes corporate agriculture at the expense of farmers; and (3) It does not recognize the landless farmers. (PANAP 2014)

<sup>85</sup> The World Bank defines climate-smart agriculture as “an integrated approach to managing landscapes – cropland, livestock, forests and fisheries – that address the interlinked challenges of food security and climate change”. See: <http://www.worldbank.org/en/topic/agriculture/brief/foster-climate-smart-agriculture>.

identified barangays (villages) or clusters of barangays with the highest concentration of land reform beneficiaries under the country's Comprehensive Agrarian Reform Program. Through ARCs, the Philippine government encourages and facilitates tie-ups between agrarian reform beneficiaries and other farmers with agribusiness companies, most of which are involved in export production (Halim 2006). Marketing tie-ups include contract growing, joint venture, and lease arrangements. In reality, ARCs have become a mechanism for the Philippine government to implement the neoliberal trade theory of comparative advantage, requiring certain areas of the country to be planted to export winners and other commercial crops instead of national staples such as rice and corn. Moreover, the production arrangements allowed local landlords and agribusiness companies to exert effective control over lands already distributed or in the process of distribution to farmers under the agrarian reform programme.

16. In the Philippines, the World Bank does not have third-party investments in financial intermediaries or direct investments in companies involved in agricultural projects that are as controversial as those in Cambodia and others. What is notable, however, is that World Bank financing for Philippine agriculture has expanded by 75% from a decade ago, with an increasing bias towards private investments in agriculture.
17. The impact of World Bank financing in agriculture on rural communities in the Philippines is evaluated through a featured case study of the World Bank-funded Mindanao Rural Development Project (MRDP). The case study affirms that while the World Bank has historically used its lending to gain advantage in setting neoliberal policies in agriculture, this time it has influenced financing mechanisms to allow the direct involvement of private finance in agriculture.
18. The case study points out that the MRDP is, strictly speaking, a PPP. The Philippine government is shelling out counterpart funding, while the local economic oligarchs, both in infrastructure and agribusiness, are involved in construction and trading. Foreign suppliers of technology and buyers of agricultural products also gain from the partnership. Moreover, in place and institutionalized is an irrigation fee, which ensures the profitability of the project. Among Southeast Asian countries, only in the Philippines does a World Bank agricultural project charge such a thing as an irrigation fee to the farmer. The World Bank has historically introduced user fees to recoup its investments in other sectors.
19. Although none of the areas covered by the MRDP shows outright land grabbing, the case study finds that they bear explicit elements that lead to farmers' dispossession through lending. World Bank financing continues to be in the form of loans, coursed through the local government agencies – in this case an irrigation agency which subsequently imposes a fee for a crucial agricultural support service. Any farmer mired in irrigation debt stands to lose his or her land.
20. The case study reveals that the World Bank has introduced a credit facility, Sikat Saka, which is adding to the farmers' indebtedness instead of uplifting them in their plight. The threats of climate change and other weather disturbances such as the El Niño drought phenomenon and super-typhoons are incorporated in the risk insurance of the loan.
21. Overall, the case study concludes that the MRDP is not focused on addressing the fundamental problems of Philippine agriculture as the first step in enhancing farmers' livelihoods. Instead, it builds on existing conditions of impoverishment, landlessness, oligarchic control of the economy, and governmental neglect to gather a handful of farmers

and capacitate them with a little capital, simply adding to the layer of rent-seeking activities in the rural economy. Thus “empowered,” the farmers may, at most, become small-time rentees. But more often than not, they grow in debt, lose what precious land they own, or become poorer contractual farm labourers. In many cases, the farmer-beneficiaries take on more risks in borrowing, emboldened by the new finance capital, but without real support from the World Bank and the government.

22. The case study further concludes that corporate capital – including finance capital – is not the type of investment that will serve the needs of rural communities and the long-term Philippine development agenda. Corporate and finance capital will always emphasize profits from exports, agribusiness, global value chains, and even important services such as irrigation. Massive landlessness in the countryside deprives an overwhelming majority of rural families of a sustainable and productive livelihood. What is needed for capital to be freed up is to implement genuine land redistribution to farmers – who are the real and biggest investors in agriculture.
23. The following recommendations for advocacy and action for life-enhancing agriculture are offered:
  - Advocacy efforts should emphasize effective land redistribution to landless farmers and their access to modern technology, infrastructure, equipment, agricultural services (including irrigation), etc.
  - Small farmers should be viewed not merely as producers, but also as consumers whose spending capacity ought to be improved in order to spur domestic economic production. This can be done through genuine agrarian reform and a substantial increase in agricultural wages.
  - The World Bank must be exposed and held accountable by targeting specific investments and projects concealed through financial intermediaries, focusing on the negative impacts on food, agriculture, and rural communities.
  - Churches and agricultural communities must engage at the policy-making level and, beyond simply coming up with internal or voluntary mechanisms for more responsible investment, build proposals for life-enhancing agriculture based on community rights and aspirations.

## Introduction

In April 2016, over a thousand farmers and agricultural workers across Bukidnon held a die-in protest before the provincial capitol to seek action on urgent issues confronting peasant communities in the province. One of these issues is the rising cases of land grabbing due to private investments in agriculture, an increasing trend in Mindanao, southern Philippines, where Bukidnon province is located.

The protest, led by Kahugpungan sa mga Mag-uuma sa Bukidnon (KASAMA-Bukidnon), an organization of farmers in the province, also pressed the local government to address the growing hunger in the drought-affected peasant communities. According to the farmers, the El Niño has worsened their situation in the countryside. Faced with threats of land grabbing and militarization, farmers now have to deal with the extreme drought without the much-needed government support.

“The story is familiar,” said Jun Benemerito, chairperson of KASAMA-Bukidnon. “The government has never provided any genuine support for us poor farmers. It says it doesn’t have enough funds to provide farmers with proper irrigation facilities to weather this kind of extreme condition. And instead of providing the structures we need to survive, the government encourages farmers to lease our lands to corporations.”

The story is indeed familiar. Around the world, as big private investments increase in agriculture, so have cases of land grabbing and human rights violations. Private investors and developed countries are targeting agricultural lands for investment. Governments of underdeveloped countries, meanwhile, are facilitating these land acquisitions and private investments in agriculture, causing further displacement of local peasant communities.

The sharp increase in private financial flows in food and agriculture has become a trend in recent years. Various scholars and activists observe this as the growing financialization of the sector and of the global economy in general.

Since 2008, purchases or long-term leases of large areas of land by investors have happened at a controversial scale and pace. The last three decades have also seen notable growth in the sale and purchase of financial derivatives linked to agricultural commodities and agricultural land by banks, agricultural trading companies, and investment funds.

The phenomenon gave rise to frenzied financial speculation in food commodities and farmland, along with massive land and natural resource grabs, specifically in underdeveloped countries. There is evidence that the 2008 food inflation, for instance, was the result of the uncontrolled behaviour of financialization. The deeper problem is that the phenomenon reinforces an acute crisis cycle of bubbles and bursts. This has a tremendous impact on the real economy, including on food security.

Private investment in agriculture has become almost synonymous with a host of socio-economic, environmental, and human rights problems. Governments, multilateral organizations, international financial institutions (IFIs), and donor agencies have a key role in regulating financial flows and supporting local smallholder farms. But instead, they are the lead proponents of private investment in agriculture, and have so far addressed these issues only within the framework of neoliberal globalization.

The proponents of private investment in agriculture are led by the World Bank, Food and Agriculture Organization (FAO), International Fund for Agricultural Development (IFAD), Group of Twenty (G20), and the United Nations Conference on Trade and Development (UNCTAD). To rationalize private



investment in agriculture, they cite the same production problems caused by low productivity, climate change, and the growth of biofuels. Proponents also cite the decline of public investment in the sector. They believe that public investment can be enhanced by infusing private capital. They also cite the severe poverty and hunger situation in Asia to justify the focus on the region for agricultural investment.

At the same time, these proponents, led by the World Bank and supported by the FAO and regional banks such as the Asian Development Bank (ADB), are promoting models or principles of so-called responsible agricultural investment. Various funding facilities and policy platforms, such as public-private partnerships, or PPPs, are also being introduced to allow corporations and communities to supposedly mitigate risks and share mutual benefits. However, the models have brought on more substantive questions about resource control, accountability, and overall rural development.

This study aims to explain the phenomenon of financialization of global agriculture and its impact on food and agricultural systems in order to propose alternatives for financing more life-enhancing agriculture. It focuses on the role of the World Bank in facilitating these big private investments and financial flows in agriculture, as well as in influencing financing mechanisms and overall agricultural development. The research on the role of the World Bank further narrows on Asia, and particularly on the Philippines. Using a case World Bank project, the study illustrates the impacts of agricultural investment on food security, communities, rural economy, and the economy as a whole. The focus on Asia and the Philippines also compels the authors to explain the key role played by the ADB in agriculture and financing.

Specifically, this study provides an overview of the trends in private financial flows in global agriculture, including the types of investments and financial instruments being used, identifying key players and investors and their main activities. It gives an overview of the repercussions of these financial activities for global food and farm systems. In this aspect, the study also examines the national as well as regional policy environment, including the introduction of public-private partnerships, which further facilitates financial flows and activities in agriculture.

The study scrutinizes the role of the World Bank both in influencing agricultural policies and as a financing arm that paves the way for the financialization of food and agriculture. The effects of increased investor and donor demand for land and natural resources are then discussed, utilizing variables in the aspects of socioeconomics, ecology, and human rights. The study provides a critique of the current multilateral initiative led by the World Bank and the FAO in regulating agricultural investments in order to address these impacts.

The research further builds the case by introducing the financialization of Asian agriculture, and in particular the agricultural investment flows in the Philippines. Both ADB and World Bank programs and projects in Asian and Philippine agricultures are discussed and assessed, concluding with the descriptive case study. From the analysis and conclusions drawn from the data, this study aims to come up with alternative financing models or frameworks for life-enhancing agriculture.

The study uses desk research and validates secondary data with a study of a selected case. The case study uses focus group discussion with an affected community and interviews with key informants. It focuses on a World Bank project in Mindanao, southern Philippines.

The World Bank has been playing a key role in financing agricultural and rural development in the Philippines for decades. It also continues to fulfill an important part in designing policies and programs that impact the livelihood of small Filipino farmers and other rural sectors in that country. But its participation as a source of financing and policy advice has been marred by controversies.

Many of the agricultural programs and projects that it has supported have been alleged to cause further poverty in the rural communities.

One of the major focus areas of World Bank intervention in the Philippines is Mindanao, where the multilateral institution has been an active supporter of the government's peace initiatives. To help reduce poverty that will contribute to building the conditions for peace, the World Bank has supported several agricultural and rural development efforts in Mindanao. One of them is the Mindanao Rural Development Project (MRDP), which was implemented in two phases: from 1999 to 2004 (phase 1) and from 2007 to 2014 (phase 2). This study looks at phase 2 of the MRDP, specifically to determine if it has achieved its stated objective of improving access to livelihood opportunities of targeted communities. It compares the results of the World Bank's Implementation Completion Report and Results Report with the actual situation of and feedback from the beneficiaries.

This study uses the definition of financialization provided by classic as well as contemporary scholars. Epstein (cited in Clapp 2014:798) defines financialization as "the increasing importance of financial markets, financial motives, financial institutions, and financial elites in the operation of the economy and its governing institutions, both at the national and international levels." Often, the term refers to the growing importance of finance capital versus production capital, as Krippner (cited in Fairbairn 2014:778) describes: "the tendency for profit making in the economy to occur increasingly through financial channels rather than through productive activities."

Contemporary literature is in unison in recognizing financialization as the maturation of the crisis of the capitalist system. Montgomerie (cited in Clapp 2014:799) describes the process as "the rise to dominance of a finance-led form of capitalism in which the ownership of financial assets drives investment decisions and allows for new modes of accumulation." Arrighi (cited in Fairbairn 2014:780) observes that "capitalist accumulation shifts its emphasis from commodity production and trade to finance."

The capitalist crisis is as inherent as its contradictions. An analysis of the crisis (Africa & Guzman 2009) concludes that the boom-bust cycle of the global capitalist system has given rise to, among others, the merging of finance capital and industrial capital. This situation has created a finance oligarchy and the notable importance of the export of capital as distinguished from the export of goods. Since the crisis only reinforces itself, profits have been reinvested in financial activities instead of in production. More specifically, profits are directed towards debt and speculation.

Lotta (Africa & Guzman 2009) observes that this financial oligarchy controls finance capital, profit rates, and information on investments, profitability, etc. The expanded financial activities are meant to "siphon, centralize and reinvest profits from the geographically dispersed production to financial channels, including organizing and financing corporate takeovers, insuring investments against risks, creating new financial instruments, etc." All cited works agree that financialization increases the disconnection or distance between finance and production. They also establish how neoliberal globalization has provided for the vast expansion of financial activities in the economy.

In food and agriculture, Isakson (2014) identifies financialization to be taking place in food retailing, agricultural risk and price-setting, food trade and processing, and agricultural inputs and farmland. Another study (Murphy, Burch & Clapp 2012:6) classifies financialization of food and agriculture into two areas: food commodities and food production. In the case of food commodities, it is important to look at how investors' speculative activities are delinked from any interest "in taking possession of any physical commodity" and how this shapes the physical trade of food, food price volatility, and behaviour. In the case of food production, financialization refers to the practice of using various

investment funds in “buying or leasing land and producing agricultural commodities.” In this area, it is important to look at the impact of financialization on smallholder farmers’ livelihoods, on the environment, and on sub-regional agricultural systems.

Lastly, this study defines life-enhancing agriculture using variables such as a community’s access to resources, farmers’ livelihood and productivity, food security, health of ecosystems, social services, farmers’ and communities’ decision-making processes, capital resource mobilization, agricultural productivity, and overall economic development.

# 1. The phenomenon of financialization in agriculture

Some of the farmers who protested at the Bukidnon capitol came from the peasant villages in Malaybalay, where the Philippine government is implementing a World Bank-funded project that aims to improve farmers' livelihood. The project, the Mindanao Rural Development Project (MRDP), reflects the general approach of the Philippine government in agriculture as well as the role of the World Bank in financing the sector. The MRDP, in its aim to provide more income opportunities to farmers, focuses on strengthening the value chain of local farms towards global market integration. (See Box 1.)

However, this approach towards strengthening the value-chain and agribusiness ventures of Bukidnon villages has not made a substantial improvement in the livelihood of the project beneficiaries. "Our incomes are still the same; nothing is left after the cropping season," said 71-year-old Lilia Osier, a rice farmer at Barangay (Village) Managok, one of the areas covered by the MRDP. "Many of the livelihood projects in our barangay were not successful and have little impact on our farming and incomes."

## **Box 1: Case study: Mindanao Rural Development Project in Malaybalay, Bukidnon**

The Mindanao Rural Development Project (MRDP) is a long-term development program funded by the World Bank. It aims to create a chain of economic opportunities to "bring farmers' produce to higher levels of the value chain." According to the Department of Agriculture (DA), these livelihood opportunities will use the demand-driven approach and will allow farmers to participate in the vertical integration from production to marketing.

"Value chain" refers to the full range of activities that are required to be able to bring products and services through the different phases of production and respond to consumer demand.

Phase 2 of the Mindanao Rural Development Project (MRDP 2) is an adaptable program loan (APL) of the World Bank that continues the long-term project in targeted rural communities in Mindanao. APL is the World Bank's lending instrument for phased support for long-term development programs.

Spanning 15 years, phase 1 of the program (MRDP 1) was initiated in 1999 and closed in 2005; MRDP 2 started in 2007 and closed in 2014. MRDP 1 covered 32 municipalities in five provinces in Mindanao. For MRDP 2, the coverage was expanded to 225 municipalities in all of Mindanao's 27 provinces. The main beneficiaries were poor farmers, fisherfolk, and indigenous people, including women.

Aside from expanding the coverage, MRDP 2 also included institutional strengthening. Thus, apart from poverty reduction efforts, it likewise reinforced the implementation of national laws, Local Government Code (LGC), and the Agriculture and Fisheries Modernization Act (AFMA). The national DA served as the World Bank's main partner in implementing MRDP 2.

In all, a total of US\$90.01 million was disbursed for MRDP 2. Of the said amount, the World Bank's International Bank for Reconstruction and Development (IBRD) accounted for US\$81.52 million, while its Global Environment Facility (GEF) program accounted for US\$5.62 million. The Australian Agency for International Development (AusAID) also contributed US\$2.87 million.

In particular, MRDP 2 has the following objectives:

- improve livelihood opportunities for targeted communities; and
- institutionalize a decentralized system for agriculture and fishery services delivery that promotes participation, transparency, and accountability.

It has four components:

- Investments for Governance Reform (IGR) and program administration for strengthening the institutional capacities of the DA and the participating local government units, or LGUs (US\$4.40

- million);
- rural infrastructure (RI), for increasing public investments in critical infrastructure supportive of agriculture and fisheries development (US\$83.52 million);
- Community Fund for Agricultural Development (CFAD), for expanding livelihood opportunities in the rural areas (US\$30.0 million); and
- natural resource management (NRM), which focuses on watersheds and coastal areas that impact on agriculture and fisheries productivity (US\$11.75 million).

Note that the amounts mentioned for each component cut across the various components; thus, they do not add up to the total disbursed amount of US\$90.01 million. NRM, for instance, included CFAD-type projects called Sustainable Income Generating Activities (SIGA) and Strengthening of Community Partnership in Monitoring.

For purposes of this research, the case study looks into the project's impact in relation to its stated first objective (i.e., "improve livelihood opportunities for targeted communities") by looking at the experience of CFAD beneficiaries and those directly benefiting from irrigation projects under the RI component in selected villages. The target areas for the case study include four villages: Managok, Simaya, Apo Macote, and San Martin in the city of Malaybalay in the province of Bukidnon.

Malaybalay is the capital and administrative centre of Bukidnon province and is classified as a first income class component city (e.g., with an average annual income of Php400 million or more; about US\$8.39 million). Latest available official data (2012) pegged poverty incidence in Malaybalay at 31.6 percent. The figure represents no significant improvement from the 31.7 percent poverty incidence the city registered in 2006, or prior to MRDP 2.

The city is mainly an agricultural area. Its main produce includes rice, corn, sugar cane, vegetables, legumes, root crops, and commercial crops such as rubber, coffee, bananas, and pineapples. Poultry and hog raising are also among the main economic activities in the city.

There are eight CFAD subprojects ongoing in eight villages in the city. (See table 1.) Each subproject is worth Php250,000 (US\$5,244), or a total of Php2 million (US\$41,949), with 133 beneficiaries.

**Table 1.: Malaybalay villages with ongoing CFAD subprojects**

| Village    | Subproject                                  | Cost (Php) | No. of beneficiaries | People's organization                               |
|------------|---|------------|----------------------|---|
| San Martin | Corn sheller, rice sheller & turtle sheller | 250,000    | 19                   | Irrigators Association (IA)                         |
| Indalasa   | Corn production                             | 250,000    | 18                   | RIC- BRGY INDALASA                                  |
| Silae      | Cattle corn production                      | 250,000    | 18                   | Silae Farmers Association                           |
| Busdi      | Carabao & corn production                   | 250,000    | 0                    | Bufia (Busdi farmers-irrigators' association, Inc.) |
| Patpat     | Corn/ginger/tilapia culture                 | 250,000    | 27                   | RIC-Brgy Patpat                                     |
| Miglamin   | Organic rice production                     | 250,000    | 0                    | MIA (Miglamin irrigators association)               |
| Magsaysay  | Cattle production & vermiculture            | 250,000    | 21                   | (RIC) Rural improvement club                        |
| Kibalabag  | Corn/sweet pepper/tilapia culture           | 250,000    | 30                   | Kibalabag Rural improvement club                    |

Aside from the eight villages with CFAD livelihood projects, another Malaybalay village (Managok) hosts a new communal irrigation facility worth Php39.50 million (US\$830,000) funded under MRDP 2. The CIS is seen to benefit around 210 rice farmers in the barangay, covering 330 hectares of rice fields. In terms of food security, the Managok CIS was intended to promote the rice self-sufficiency of Malaybalay.

Three focus group discussions with at least seven beneficiaries each of a CFAD livelihood project and of the Managok irrigation facility were conducted to independently assess the impact of MRPD 2 in terms of livelihood of the target rural communities. Two key informant interviews were also done with the leaders of the people's organizations involved in the projects.

Financing agricultural programs such as the World Bank's MRDP is not new. Along with other multilateral institutions, the World Bank has been key in influencing agricultural policies in line with its market-oriented model. Such a framework has been criticized for prioritizing the needs of developed countries over the interests of the domestic economy and agriculture.

In recent years, multilateral institutions like the World Bank have played an increasing role in facilitating financial flows in agriculture. These investments are aimed at increasing the values of land and agricultural commodities for speculation and futures commodity trading.

A liberalized policy environment, including national policies such as those in the Philippines favouring private investments and activities in agriculture, plays a significant role in facilitating this growing phenomenon.

### *Investment flows to agriculture*

According to the World Investment Report 2009 of the UNCTAD, foreign direct investment (FDI) in agriculture increased tremendously, from only US\$1 billion per year in the 1990s to US\$3 billion per year in 2005–07 (UNCTAD 2009).

The period of the global food crisis in 2008–09 saw the largest FDI inflow into agriculture, amounting to US\$25 billion. This is almost double the level in 2003, according to the fDi Markets database, a private listing of companies investing overseas.

The World Investment Report 2015 shows that mergers and acquisitions net sales amounted to US\$23.4 billion in the seven-year period of 2008 to 2014, or an annual average of US\$3.3 billion (UNCTAD 2015), while the amount was only US\$10.1 billion in the previous seven years (2001–2007), or an annual average of only US\$1.4 billion (UNCTAD 2009).

Private investment in agriculture is now greater than official development assistance (ODA) (IFAD 2014). In 1990, ODA was almost twice as large as FDI in developing countries. Despite the growth in total ODA from US\$58 billion to US\$117 billion between 1990 and 2006, the aid invested by governments now is less than one quarter of the total invested by the private sector (Weirowski & Hall 2008).

These are underestimated flows of agricultural investment. Data are unavailable for many countries, while investments by large institutional investors – such as mutual funds, banks, pension funds, hedge funds, insurance companies, private equity funds, sovereign wealth funds, and university and foundation endowments – are not included in the estimates of FDI (FAO 2014). According to the Bank of International Settlements, these funds managed US\$46 trillion in 2005 (Clapp 2014). A 2010 survey of agricultural investment funds in several developing regions, although not comprehensive and excluding East Asia and the Pacific, found that such funds have increased in number and value (Miller et al. 2014:51),

Food and agriculture is an emerging asset class in the investment world, according to an investment outlook article (Valoral Advisors 2015). As of 2015, it includes over 240 investment funds that manage about US\$45 billion in assets. This figure is far more than the combined estimates of FDI. These investments are further categorized:

- listed equities – funds invested in listed companies in the food and agriculture industry
- farmland – funds dedicated to acquire and/or lease farmland for crops or cattle production
- private equity – funds put in established companies operating along the food and agriculture value chain
- agricultural commodities – investments in grains, oilseeds, and other soft commodities through futures markets
- trade finance – funds that give structured solutions mainly to commodities processors and traders
- venture capital – funds invested in start-ups and early stage companies that are developing innovative products and services in the agricultural technology (ag-tech) sector
- others – funds in water and mixed strategies

Farmland funds took the lead among asset categories, accounting for 34 percent of all assets under management in 2014. Listed equities followed, with 30 percent, still as the most convenient way for investors to get exposure. On the other hand, private equity funds grew steadily as the category attracted the largest North American investors, such as Paine and Partners, Arlon Capital Partners, and NGP Global Agribusiness in 2014.

The growing appeal of food and agriculture to institutional investors points more categorically to the increasing financialization of the sector. This has been driven mainly by lower crop prices and worsening macroeconomic conditions. It indicates that institutional investors are now looking at food and agriculture to manage risks, improve diversification, and increase profits.

Pension funds across North America and Europe are among the major sources of fresh capital. Sovereign wealth funds are also taking a broader view, from investing exclusively in farmland to the entire value chain (Valoral Advisors 2015).

Trading houses are also actively involved, especially with the notable rise of the group of Asian trading houses apart from the four leading companies: Archer Daniels Midland (ADM), Bunge, Cargill, and Louis Dreyfus, or the ABCD of global agricultural flows. Meanwhile, family offices (private wealth management advisory firms that serve ultra-high net worth investors) are becoming increasingly interested in allocating capital in food and agriculture, especially in ag-tech venture capital (Valoral Advisors 2015).

The activities of these major players are contentious because they increase their agricultural exposure without prior knowledge of farming. Some of these players have never even met a farmer – yet their asset managers are innovating further capital structures and investment vehicles to increase liquidity. As a study on cereals trading (Murphy, Burch & Clapp 2012) concludes, the problem with financialization is that institutional investors are more actively involved in speculation than they are interested in possessing any physical commodity. Some investment funds, on the other hand, are indeed buying or leasing land and producing agricultural commodities – but this is commonly without regard to farmers' livelihoods and the environment.

### *Speculation in food and farmland*

The creation of fancy financial derivatives by asset managers has aggravated the recklessness of the entire financial system. One noteworthy development is the rise of commodity index funds. This has triggered unbridled speculation and a price boom in food and agricultural commodities in recent years. A commodity index is a financial derivative that is calculated based on the prices of a bundle of 20 or more commodity futures – primarily oil and metal ores, but also agricultural commodities.

This bundling – plus the fact that a commodity index is not supported by any actual assets, such as futures or physical ownership of commodities – have forced a contango. A contango is a situation where futures prices are higher than spot prices, which continually translates to actual increases in real market prices (Guzman 2011:23).

Financial deregulation since 2000, especially in the US, where the largest volume and turnover of commodity trading is taking place, has further complicated the creation of price bubbles. It has also allowed banks to offer other financial derivatives linked to investment funds in agriculture firms and farms. New agriculture funds specializing in farmland have emerged, while around 66 funds today include land in their portfolio. The International Institute for Environment and Development (IIED) estimates that around 190 private equity firms are acquiring land and other agricultural assets on behalf of their investors (Clapp 2014:803).

In the aftermath of the 2008 global financial crisis, pension funds moved towards alternative assets like forestry and agriculture, which have low correlation to traditional stocks and bonds.

Sovereign wealth funds have also launched dedicated strategies to pursue long-term investments across the global value chains in food and agriculture (Valoral Advisors 2015:15).

Transnational corporations in trading, such as ABCD (ADM, Bunge, Cargill, and Dreyfus Corporation), are also involved in the agricultural derivatives market. Each has established financial subsidiary firms that have become concerned not just with their own risk management, but also with that of third-party investors (Clapp 2014:804).

The appeal of land to institutional investors is due to its two distinct roles: land is a productive asset that can moonlight as a financial asset. Land can create income from production, but at the same time can create wealth through passive appreciation. Farmland values are much related to inflation, but not much to other investments. Thus, farmland is a good inflation hedge; at the same time, it is an excellent way to reduce portfolio risk, because investors can diversify in case of market risks (Fairbairn 2014:779). These characteristics go well with institutional investors that seek to capitalize on and profit from rising demand for food and biofuels by having a fixed land base (Clapp 2014:805).

### *Massive land acquisitions*

In 2008, the world became aware of the parasitic nature of financialization and the adverse effects of speculation on the real economy. Today, food prices have not gone back to pre-2008 crisis levels and remain high. The role of financialization in all of these continues to be the subject of debates (Guzman 2011:5).

Recent concerns are about how investment funds are used for the control of farmlands on a large scale. Two new trends have been observed: 1) that investors are seeking to gain access to natural resources, particularly land and water, and 2) that investments involve the acquisition of land and actual production instead of looser forms of association with local producers (Hallam n.d.:4).

Foreign investment in land occurs through purchase or long-term lease. The latter is the more common arrangement, since many countries prohibit the sale of land to foreigners. It has been observed, however, that the economic and social implications are the same, if not worse, for long-term leases. These typically last for 50 years and are renewable up to 99 years (FAO 2013:4).

Several organizations have estimated the area of land under large-scale transactions. The latest estimate is from the Land Matrix, a monitoring venture by the Centre for Development and



Environment at the University of Bern, the Centre de coopération internationale en recherche agronomique pour le développement (CIRAD), the German Institute of Global and Area Studies, the German Agency for International Cooperation, and the International Land Coalition.

The Land Matrix contains reports of 1,217 purely agricultural land deals comprising 83 million hectares of land over the period 2000 to 2012. Of these reports, 625 deals covering 39.3 percent of the area, or 32.7 million hectares, are classified as reliable, which means that a land transaction (i.e., at least a transfer of land rights) has taken place (Anseeuw et al. 2012:3).

The Land Matrix estimates that 754 of the land deals covering 56.2 million hectares are located in Africa; 17.7 million hectares in Asia; and 7 million hectares in Latin America. Cropland is the target of about 45 percent of the land deals covering 22 percent of the total area. Meanwhile, about 24 percent of the land deals representing 31 percent of the total area are located in forested areas (Anseeuw et al. 2012:viii).

By category of production, most of the land deals are for the cultivation of food crops (34%), followed by non-food (26%), flex crops (23%), and multiple uses (17%). In terms of area, however, it appears that foreign investors are mainly targeting land for multiple uses (31%), followed by food and flex crops (26% each).

Flex crops are those that are commonly used both for food and for biofuel production – mainly soybeans, sugar cane, and oil palm. “Multiple uses” refers to deals where production for more than one purpose is proposed.

In terms of the cross-referenced statistics, the Land Matrix shows that non-food production is the number one category (34% of deals), followed by flex crops (26%), food crops (24%), and multiple uses (16%). In terms of area, however, flex and non-food crops are dominant, which shows the extent of investors’ interest in biofuels and other more traditional high-value crops, like rubber. Multiple uses, on the other hand, provide flexibility to investors in case of price and market risks. By specific sector, biofuels account for the majority of land acquisitions. Overall, these statistics debunk the claim that the land rush was caused mainly by an impending food crisis. On the contrary, the data establishes the intention of investors in the land rush to increase their profits rather than to meaningfully address food security.

#### **Box 2: Plantations Expansion in Bukidnon**

Bukidnon is considered the food basket of Mindanao and one of the top growers of rice and corn. In recent years, the province has been witnessing the uncontrolled expansion of plantations at an unprecedented rate. The world’s biggest agribusiness corporations are eyeing hundreds of thousands of hectares of land to expand their plantations.

The Asian Peasant Coalition recently reported that the Philippine government has offered 44,000 hectares of agricultural land in Bukidnon to big pineapple plantations such as Del Monte Philippines and MD Davao Agri Ventures Inc.

According to the group, farmers in the villages of Butong, Merangiran, San Jose, Salawagan, Mibantang, Santa Cruz, Kiburiao, and Puntian in Bukidnon are at risk of losing their farms to these agri-plantations.

In other parts of Mindanao, two banana plantations plan to expand further: American-controlled Dole Philippines by 12,000 hectares, and Unifrutti by 2,600 hectares. Sugar cane plantations are targeting to expand to an additional 256,360 hectares, while cacao producers target 150,000 hectares more by 2020. Moreover, around 1 million hectares of grasslands in North Cotabato, Sultan Kudarat, and in the Caraga and Northern Mindanao regions are gradually being transformed into palm oil plantations.

Meanwhile, two government agencies have presented their plans to expand agri-plantations. The National Greening Commodity Roadmap of the DENR plans 116,000 additional hectares for rubber, 87,903 hectares for coffee, and 60,000 hectares for cacao by 2016. The Philippine Palm Oil Development Council Inc. targets 300,000 hectares more for palm oil plantations by 2023.

The rampant expansion has resulted in land dispossession, labour exploitation, and violence, including killings. Government, however, has not intervened. Instead, the military and other security forces have been alongside the big plantation owners in suppressing mass protests against unjust labour and trade practices.

*Source: REAP Mindanao Network: A Briefer on Mindanao Plantations, 2016*

### *Financial oligarchic rule in agriculture*

Most investment funds in farmland are based in Europe and North America, according to a 2010 survey by the Organisation for Economic Cooperation and Development (OECD). European firms account for 40 percent of all land acquired in Africa, while North American companies account for 13 percent. In particular, European and North American firms dominate investments for the production of biofuels in Africa (FAO 2013:6).

Buyers range from established agribusinesses as well as new food and agriculture firms to investment funds and financial firms. Land Matrix data show four types of investors: private companies (442 projects, 30.3 million hectares); state-owned enterprises (SOEs) (172 projects, 11.5 million hectares); investment funds (32 projects, 3.3 million hectares); and public-private partnerships (PPPs) (12 projects, 0.6 million hectares). It must be emphasized, however, that these buyers are invariably attached to financial firms or have established their own fund managers to capture the overflowing finance in agriculture.

The largest land acquisitions that have taken place so far are by transnational corporations that are either in food and agriculture production and processing or in trading. Their monopoly position in food and agriculture allows them to easily facilitate land transactions. For instance, the Japanese corporation Mitsui bought 100,000 hectares of land in Brazil for soybean production. The deal was made through Mitsui's 25 percent stake in Multigrain SA, the Brazilian subsidiary of the Swiss grain trader Multigrain AG. The other owners of Multigrain SA are the US energy and food company CHS Inc. and Brazil's PMG Trading (Guzman 2010:19).

As a strategy, trading corporations such as the ABCD set up their own investment fund management to handle their farmland acquisitions. Bunge, for example, established an investment fund that would focus on agricultural lands, especially in South America, to expand its sugar and ethanol holdings. Even Cargill's Black River Asset Management, which has US\$6 billion in assets under management, is increasing its private equity business, focusing on food production and farmland investments. It has dairy farming in Asia and aquaculture projects in Central America and South America (Guzman 2010:20).

Recently, the new group of Asian trading houses, called NOW (Noble, Olam and Wilmar), is seeking to challenge the global network of ABCD. Japanese trading corporations such as Mitsui, Mitsubishi, Itochu, Marubeni, and Sumitomo are also expanding their footprint in the global agriculture. Their recent move to acquire land is seen as a strategy to compete with ADM or Cargill in order to secure a foothold in China, where ADM, Cargill, and Bunge are not that strong (Valoral Advisors 2015:15; Guzman 2010:20). Mitsui has a global grains operation established in some of the key producing markets. Marubeni acquired the agricultural operations of US-based Gaviola. Sumitomo completed a full takeover of Australian-based Emerald Grain in early 2014, while Mitsubishi Corporation acquired several assets in Brazil in 2013 (Valoral Advisors 2015:15).

The direct involvement of financial firms in land acquisitions further proves the extreme degree of financialization that is taking place in global agriculture and economy. Among the most questionable transactions involve Morgan Stanley, with its 40,000-hectare purchase of farmland in Ukraine; Goldman Sachs, in its takeover of farmland rights in China's poultry and meat industries; and the New York-based BlackRock, Inc., which established a US\$200 million agricultural hedge fund, of which US\$30 million is specifically allotted for land acquisition (Guzman 2010:9). These transactions are further evidence that, more than securing food, the land rush is being driven by the potential for huge financial profits.

Meanwhile, family offices are the most active investors in ag-tech venture capital funds, which were deemed to be one of the investment hotspots in 2014. Investment analysts stress the significance of innovation and technology in addressing the global food challenge in the succeeding decades. An integral part of the entire agricultural value chains, ag-tech combines traditional segments such as seeds, crop nutrition and protection, and agricultural machinery. Ag-tech venture capital has the most opportunities when it comes to intellectual property (Valoral Advisors 2015:30).

Agri-chemical transnational corporations have developed their own venture arms to lead this so-called innovation wave by collaborating with entrepreneurs and start-ups. These are Monsanto Growth Ventures, Syngenta Ventures, Dow Venture Capital, DuPont Ventures, BASF Venture Capital, GE Ventures, and Intel Capital. With their venture capital funds, they continue to monopolize technology, brands, market information, and global resources by maintaining the regime of intellectual property rights.

In 2014, Google chairman Eric Schmidt's Innovation Endeavors and Flextronics Lab IX launched Farm2050, a partnership that supports ag-tech entrepreneurs and start-ups with capital, design, manufacturing, and test farms. Farm2050 includes Google, DuPont, Agco, UTC's Sensitech, and 3D Robotics (Valoral Advisors 2015:31).

Finally, state-owned enterprises (SOEs) mainly from the Gulf states, China, and South Korea are involved in large land investments (Anseeuw et al. 2012:24). One of the most active SOEs is the COFCO Group from China, which established an agribusiness joint venture with Noble in 2014. In the same year, COFCO also acquired a 51 percent stake in the global trading house Nidera, which together with Glencore took over the Canadian company Viterra in 2012 (Valoral Advisors 2015:12). Chinese SOEs are said to be actively ensuring access to supplies of agricultural commodities for the domestic market, as well as building consumer food brands within China.

At the start of 2015, there was a bearish short-term outlook with regard to farmland investment since the rapid appreciation of farmland prices ended in 2014. But opportunities continued to rise, especially with the promotion of permanent crops and by going beyond prime regions. The uniqueness of farmland to the investor is that during value depreciation, the asset can still rake in huge profits through crop diversification.

#### *More systematic resource flows from public to private*

Both source and host governments have officially participated in the land rush by setting up funds and facilities with the purpose of facilitating private investors in the food and agriculture sector. Some governments have established development funds such as subsidies, soft loans, guarantees, and insurance to fund SOEs or private-sector companies. Governments have also created agencies such as export credit agencies in investor countries and investment promotion agencies in host

countries. These also provide informational, technical, and bureaucratic support to the private sector.

One significant development is how proponents of private investment in agriculture have been actively pushing for public-private partnerships (PPPs) as a platform. The World Bank, being the chief advocate, along with the IFAD, FAO, World Economic Forum, G20, and the Canadian, American, and German governments, has included PPPs and private-sector investment in its agricultural aid strategies (Haupt, Tucker & Stanley n.d.).

Proponents of public-private partnerships in agriculture defend them by citing the shortcomings of the public sector, specifically the inefficiency of centrally planned development projects. They also observe that public capital is scarce and foreign investor appetite in agriculture infrastructure is low, especially during crises. This is supposedly reduced when risks are shared by the state (Oze 2014).

The FAO defines PPPs as formalized partnerships between public institutions and private partners, where the anticipated public benefits are clearly defined, risks are shared, and active roles exist for all partners at various stages throughout the PPP project life cycle (Rankin 2014).

International financial institutions (IFIs) such as the World Bank and donor agencies have designed various financial facilities to support national government programs to engage the private sector in agri-food projects. These facilities provide assistance that governments can make use of, whether in terms of PPP design or resources. IFIs and donor agencies have coined the term “development PPPs.” The past 15 years have witnessed a proliferation of development PPPs between the private sector and the international donor community, starting with the German Federal Ministry for Economic Cooperation and Development (BMZ) in 1999. Since 2001, the United States Agency for International Development (USAID) alone, under its Global Development Alliance program, has formed more than 1,500 development PPPs with over 3,500 partner organizations (USAID 2015).

The reality is that the PPP serves as a tool for development cooperation, which gives IFIs and donor agencies a significant role in pushing for private investments in agricultural commodities, firms, and land. It conveniently embeds private agricultural investment in the framework of development and facilitates the more systematic flows of public resources to private profits.

Today, partnerships may be found in five intervention areas: farm-to-market roads; wholesale markets; water for irrigation; seed technology, agriculture research, and innovation; and value chain development. (Guzman 2015) The World Bank, USAID, IFAD, FAO, and even the World Economic Forum are actively involved in these areas.

### **Box 3: *Mindanao Rural Development Program: A Public-Private Partnership Project***

In 2013, the Department of Agriculture (DA) announced that the Mindanao Rural Development Program (MRDP) is being scaled up from a community-based initiative to a more enterprise level. It would become part of the Philippine Rural Development Program (PRDP). With this development, the regional office of the DA reported that it is encouraging Mindanao provinces to identify public-private partnership (PPP) projects for their areas. The department said it will ask other agencies to seek opportunities and link the DA programs to potential private partners.

From the start, the MRDP can already be considered a PPP project. Through the DA, the Philippine government provides counterpart funding to a World Bank initiative. Meanwhile, agribusiness and infrastructure firms, as well as foreign suppliers and traders, provide the services required by the project. To ensure the profitability of the project, farmers are made to pay irrigation fees, an unusual practice compared to other Southeast Asian countries.

Under the rural infrastructure component of the MRDP project, the World Bank built a communal irrigation

subproject in Barangay Managok, costing Php39.5 million: 50 percent from the World Bank, 40 percent from the DA, and 10 percent from the local government unit (LGU). The National Irrigation Administration (NIA) applied for the loan with the MRDP through the city government of Malaybalay. The city government held a bidding and the firm Dacon Corporation, a subsidiary of DMCI Holdings, won the bidding. DMCI Holdings is owned by D.M. Consunji, one of Philippines' billionaires and top oligarchs.

The irrigation system has two component dams built along the Balongkot Creek. Dam 2 is an old existing dam that was simply rehabilitated from the devastation of typhoon Pablo, while Dam 1 is newly built. The two dams cost Php25 million. The remainder of the Php39.5-million fund was spent on canalization. A 7.2-kilometre canal was built, while the irrigators association's (IA) equity is a carved-out 1.5-kilometre earth canal.

The land on which Dam 1 was built was bought by the city government from a Mr. Angeles for Php1.2 million. Other sources, however, claim that the land was foreclosed by the Land Bank of the Philippines (LBP), which could be due to unpaid land amortization.

Construction started in July 2013 and was completed in August 2014. The national DA inaugurated the project in November 2014, with the DA secretary Proceso Alcala, no less, gracing the ceremony. Sec. Alcala also gave a package of assistance that included production inputs worth Php208,000 distributed to the IA, two threshers, 50 bags of unhusked rice seeds, five carabaos, and collapsible dryers. Sec. Alcala also directed the National Corn Program and the DA field office in the region to deliver 100 bags of open pollinated corn varieties to the municipality.

The World Bank targeted around 210 farmer-beneficiaries of Bgy. Managok IA, covering around 350 hectares of farmlands. But the IA currently has only 110 members.

The main problem comes from the community's discontent over the irrigation system. "No water is coming," said a farmer from Bgy. Managok. "Irrigation is on rotation for six hours, which can only irrigate three hectares." This situation is aggravated by the exorbitant user fees: through the IA, the NIA collects an irrigation fee of Php1,000 per hectare per cropping.

Balongkot Creek is rain-dependent and too small. Before the project, there was only a canal and the creek. But what NIA built, according to the beneficiaries, is too narrow. "This is not even a river," said the farmers. "When the creek is dried up, the NIA also does not even show up in the community to check if there is water for irrigation. It does not even clean the canal when it is dry."

The problems in irrigation have increasingly become the source of conflict in the community. At times, according to the farmers, the conflict would get violent because of the limited water coming from the irrigation system.

### *The role of the World Bank*

Multi-donor initiatives seemed to have emerged to address the global food crisis, but it has been conspicuous how IFIs and donors have only facilitated private financial flows in agriculture.

It is notable that in 2008, the World Bank, after decades of institutional disinterest in agriculture, themed its World Development Report (WDR) *Agriculture for Development*. The report is the major analytical publication of the World Bank. Published annually, it focuses on a particular aspect of development each year. The 2008 edition called for increased agricultural investment in developing countries and for "agriculture to be at the center of the development agenda if the goals of halving extreme poverty and hunger by 2015 are to be realized." It defined a "market-oriented agriculture" and emphasized the dominant role for the private sector in institutional lending.

In the same year, the United Nations (UN), World Bank, International Monetary Fund (IMF), and World Trade Organization (WTO) met in Bern, Switzerland, to call for a New Deal on Global Food

Policy (Holt-Gimenez, Williams & Hachmyer 2015). The World Bank targeted to integrate and mobilize partners such as the Gates Foundation, FAO, World Food Program (WFP), IFAD, other multilateral development banks, agricultural research institutes, developing country governments, and the private sector.

Under the New Deal, the World Bank promised to nearly double its own lending for agriculture in Africa, from US\$450 million to US\$800 million (World Bank website). The New Deal also called on the US\$3 trillion industry in sovereign wealth funds to create a “One Percent Solution” for equity investment in Africa, setting the tone for high-level agreements to support the WFP (Holt-Gimenez, Williams & Hachmyer 2015).

Part of the New Deal is the rapid financing mechanism called Global Food Crisis Response Program (GFRP), established in May 2008, which has allowed the World Bank to take a lead role in facilitating land purchases. In 2009, World Bank loans, grants, equity investments, and guarantees increased by an unparalleled 54 percent from the previous year; most of the increases are directed to facilitating foreign land deals (Guzman 2010:23).

During this period, the World Bank started to scale up investment and advisory support to agribusiness operations through its private sector arm, the International Finance Corporation (IFC). The IFC increased its lending by around 30 percent in the next three years after 2008. Its supported projects in agribusiness increased from 17 in 2005 to 32 in 2008. In 2009, the IFC established a US\$625 million alliance with the hedge fund Altima Partners to get into land deals and direct farming operations.

The IFC assists host governments in creating procedures that facilitate the availability of land for new investment and are permissible for foreign ownership. On the other hand, the Foreign Investment Advisory Service (FIAS), which is under the IFC, enables host governments to improve the investment climate for investors to acquire and secure property rights at reasonable costs. These include reformed land use planning and construction laws (Daniel & Mittal 2010).

According to the IFC and FIAS, lack of access to land in underdeveloped countries hinders investment and competition. Thus, through their technical assistance advisory services (TAAS), the IFC and FIAS hope to increase and simplify land access for the private sector. Since such an aim is politically charged, the IFC often works with governments (Daniel & Mittal 2010:13).

One way to grasp the role of the World Bank in the financialization of global agriculture is to examine the TAAS. In particular, since 2008 the FIAS has created specific products (technical assistance) that aim to increase investor access to land. The access to land product, focused on accessing, securing, and developing land, was implemented in Vietnam and Benin, and was phased out at the end of 2009. The investing across borders product is similar to a product of the IFC that surveys investment climates and policies. But it expands the scope to include foreign ownership restrictions in 20 sectors, the process of establishing foreign companies, access to land, and the use of international arbitration (Daniel & Mittal 2010:14).

Perhaps the most critical product so far, which by early 2010 had yet to be formally introduced, is the land market for investment product. It aims to a) design and implement effective policies and procedures for making serviced land available for new and expansion investment; b) develop simple and transparent procedures for investors to acquire and secure land property rights; and c) streamline government approvals for land development to reduce the time and cost for investors to comply with zoning, environment, and building safety requirements (Guzman 2010:24).

One more aspect of the IFC and FIAS TAAS is the assistance given to governments in drafting national laws. The FIAS, for instance, helped the Sudan government modify six investment laws in 2008. Since then, various land deals have been enacted, allocating over a million hectares of land.

Another aspect is the promotion of leasing. For example, the IFC has financed 200 leasing projects in 50 countries, amounting to US\$1.4 billion; operated 30 leasing technical assistance projects; and set up or improved leasing laws in 60 countries. It has leasing facilities all over Africa, IFC's main regional focus, such as in Ghana, Tanzania, Rwanda, Madagascar, Senegal, Cameroon, Democratic Republic of Congo, Mali, and Ethiopia (Daniel & Mittal 2010:19).

Another strategy of the IFC and FIAS is to declare the land for sale or lease as "idle land." This has been done by the Ethiopian government at a tremendous scale, such that it was estimated in 2010 that 3 million hectares of idle lands would be allotted by 2013, which is equal to more than 20 percent of the country's land under cultivation (Daniel & Mittal 2010 :20). The World Bank promotes the concept of potential land availability, which it currently pegs at 1.725 billion hectares – 76 million hectares of which is in East Asia and South Asia (Borras & Franco 2011:17).

The Multilateral Investment Guarantee Agency (MIGA), like the IFC, is one of the five principal agencies of the World Bank Group. The rest are the International Bank for Reconstruction and Development (IBRD), International Development Assistance (IDA), and International Center for Settlement of Investment Disputes (ICSID). MIGA was established to promote FDI in developing countries by offering political risk insurance and credit enhancement guarantees to investors. These will help protect foreign direct investments against political and non-commercial risks in developing countries. While the IFC and FIAS are responsible for buying up rights to farmlands, the MIGA provides land projects with political risk insurance. For instance, it has put up US\$50 million as cover for Chayton Capital's US\$300 million business investments in Zambia and Botswana (GRAIN 2010).

At present, the World Bank's Agriculture Action Plan 2013–2015 is guiding its work in agriculture, in combination with its prior action plan for 2010 to 2012. (See Box 4.) These action plans operationalize the strategic insights articulated in the WDR 2008. As such, the World Bank continues to implement the same framework of promoting market orientation and financialization of agriculture, including an emphasis on increased access to agricultural inputs and "improved" seed varieties.

The Action Plan 2013–2015 specifically prioritizes PPPs and focuses on the private sector; pushes for the opening up and integration of domestic markets into global value chains; and promotes index-based climate risk insurance that is no different from other financial derivatives. To address issues of land tenure, the action plan promotes market-oriented land reform: i.e., land markets, titling programs, and simple land administration reforms. The aim is for smallholder farmers to use land as loan collateral, or if they are too small, to sell to larger farmers and leave agriculture altogether (Holt-Gimenez, Williams & Hachmyer 2015:15).

**Box 4: World Bank's Agriculture Action Plan: 2013–2015**

In its current action plan for agriculture, the World Bank identified seven areas to which to give more emphasis:

- Climate-smart agriculture, including increasing the share of IBRD/IDA/IFC agriculture lending and investments that support climate change adaptation and mitigation;
- Facilitating private sector response, including increasing IFC's agribusiness investments by about 65% (projected) to, on average, US\$4 billion to US\$5 billion annually in the 2013–15 fiscal year;
- Pursuing agriculture risk management more explicitly and continued development of new market-based risk-hedging instruments for farmers;

- Improving gender mainstreaming;
- Giving greater attention to nutritional outcomes of agricultural actions;
- Making more use of landscape approaches, including increasing the number of projects that combine agriculture, water, forestry, and biodiversity complementarities; and
- Governance, including strengthening analytical work to better understand the nature of political and institutional constraints to improving agriculture performance, and support to improve the governance of land tenure.

*Source: World Bank Group agriculture action plan 2013-2015*

Such scaled-up support, detailed in the action plan, explains the World Bank commitment to agriculture and related sectors, which was pegged at US\$8 billion to \$10 billion a year for 2013 to 2015. In its previous action plan (covering 2010 to 2012), the World Bank commitment for the sector was US\$6 billion to \$8 billion a year. The baseline was at US\$4 billion a year for 2006 to 2008.

World Bank lending for agriculture, fishery, and forestry averaged only US\$2.73 billion for 2013 to 2015, and US\$2.69 billion for 2011 to 2015. Asia (i.e., East Asia and the Pacific and South Asia) accounted for the largest share of cumulative World Bank lending for agriculture for 2011 to 2015, with about 42 percent. Africa ranked second, with 34 percent (World Bank Group 2015).

Relative to other sectors being supported by the World Bank, agriculture, fishery, and forestry got the fifth-highest share of cumulative lending for 2011 to 2015, with 7 percent of the total US\$193.23 billion. Public administration, law and justice (22%) was the World Bank's most prioritized sector, followed by transportation (16%); energy and mining (13%); health and other social services (13%); water, sanitation, and flood protection (10%); and education (7%). The same trend is true in Asia (East Asia and Pacific and South Asia), with agriculture, fishery, and forestry getting 7 percent of the regional total (World Bank Group 2015).

Lending commitments to agribusiness and forestry from the World Bank's private-sector lending arm, IFC, on the other hand, averaged US\$1.24 billion for 2013 to 2015 and US\$1.05 billion for 2011 to 2015. Thus, even combining the IBRD, IDA, and IFC investments in agriculture/agribusiness during the period, World Bank support to the sector still fell short of its action plan targets (IFC annual reports).

Nonetheless, there was a significant increase in World Bank investments in agriculture, fishing, and forestry, with IBRD and IDA support rising in absolute terms by 42 percent between 2011 and 2015. Among all the regions, East Asia and Pacific and South Asia posted the biggest increase, with the combined IBRD and IDA lending to the said regions growing by 161 percent. Meanwhile, IFC commitments to agribusiness and forestry during the same period rose by 169 percent, the largest among all sectors.

IFC investment, including in agriculture, has been increasingly channelled through financial intermediaries (FIs) or third-party financial entities. FIs include banks, insurance companies, microfinance institutions, and private equity funds. These are now the largest beneficiaries of World Bank investment through the IFC. Between July 2009 and June 2013, for instance, IFC investment in FIs reached US\$36.11 billion. For comparison, the entire World Bank Group invested a smaller US\$34.42 billion on health and education in the same period, while the IFC's own direct investment was also lesser, at US\$22.55 billion (Bretton Woods Project 2014).

The much bigger surge in IFC investments, including those directed through FIs, compared to IBRD and IDA, reflects the greater focus of the World Bank on promoting the role of the private sector in agriculture through agribusiness ventures, PPPs, and others, as articulated in the WDR 2008 and its



corresponding action plans, as well as the profit-making motives of financial players at the expense of the stated poverty reduction objectives of the World Bank. Indeed, the deeper issue, as far as the World Bank's role in agricultural development is concerned, is not its failed lending targets but its continued promotion of flawed policies and programs that hurt small farmers more while facilitating greater corporate control of land and other rural resources.

### *Financing corporate takeover of agriculture?*

The key role that the World Bank plays in agriculture as a source of investments and in policy setting makes it a powerful institution that determines small farmers' access – or lack of it – to land and other resources. Unfortunately, some of the projects being financed by the World Bank have been involved in alleged land-grabbing cases in developing countries. (See Box 5.) In fact, between 2008 and 2013, around 20 formal complaints were filed by local communities, which claimed that World Bank investments have violated their land rights. Of these cases, 12 were in Asia Pacific, five in Africa, and four in Latin America. Land conflicts also comprised 60 percent of the complaints filed before the Compliance Advisor/Ombudsman (CAO) of the IFC in the 2000s (Geary 2012). The CAO is the official complaints mechanism of the IFC.

#### **Box 5: MRDP: Threat of Land Dispossession**

Around the globe, the World Bank has financed various projects that have been involved in alleged land grabbing and land dispossession.

The MRDP, through lending financed by the World Bank, has inherent mechanisms that lead to farmers' land dispossession. The World Bank loans for the project were channelled through government agencies like the Department of Agriculture (DA) and the National Irrigation Administration (NIA). The agency in turn obliges farmers to pay irrigation fees. Farmers stand to lose their land to the agency if they fail to pay their irrigation debts.

In Bgy. Managok, farmers, through the irrigation agency, accessed crop subsidy under the DA's Sikat Saka program. The Land Bank of the Philippines, the lending arm of the program, lends Php50,000 per hectare with 10% interest, payable in six months. However, if the farmer fails to pay, the NIA confiscates the land by taking charge of production and working on the land until the loan is paid. Meanwhile, the farmer renders labour on his or her own land.

"We become labourers in our own land," said one rice farmer in Bgy. Managok. "Now with the drought, the crops are all dried up. The harvest is not enough and there will be none left for our income."

Farmer Lilia Osier added, "We expected the calamity funds to come and give us relief. But the funds did not come."

In Bgy. Apo Macote, the irrigation system was rehabilitated, allegedly through funds from the Mayor's office. The DA also provided a water pump and completed a road pavement project. This was an improvement, according to irrigation officer Martin Mendoza, but does not reverse cases of confiscated land titles. "If farmers fail to pay their debts from irrigation fees, the certificate of land titles remain with the NIA," he said.

From rice farms, the DA is pushing the credit facility now in corn farms. Similar to Bgy. Managok, the DA provides access to market to the Corn Growers Association in Bgy. Simaya. The agency gives 20 kilos of yellow/white corn seeds, while the farmer is obliged to return 40 kilos of corn. Like the farmers of other barangays, farmers in Bgy. Simaya have also accessed Sikat Saka. The farmers can borrow as much as Php41,000 and pay back Php43,000 (which is already insured), unlike in the LBP, where farmers apply for a Php35,000 loan, get only Php31,000, but will have to pay Php38,000 eventually.

However, as in other Bukidnon barangays, Bgy. Simaya farmers face the threat of losing control of their land. They can borrow Php50,000 per hectare, but if the farmers fail to pay, the NIA will take over the land and the farmers will have to work on the land until the loan is paid.

Farmers in Bgy. Simaya earn Php24,000 on average. Their expenses of Php15,000 are charged to the tenant. From the farmers' income, however, is deducted Php4,500 for the harvesters and Php1,000 for the harvesters' food. An amount of Php5,000 is deducted as payment for their loan, leaving the farmers a net income of Php13,000. Divided by 105 days, a typical farmer earns a meagre Php123.81 a day.

"Nothing is left," said a farmer from Bgy. Simaya. "Everything goes to paying the loans, even our land."

Some of these IFC investments are channelled through FIs. In Cambodia, for instance, the IFC invested through the private equity fund Dragon Capital Group in Hoang Anh Gia Lai (HAGL), which leased vast tracts of land for rubber plantations. Several indigenous communities filed a formal complaint against HAGL in 2014. According to the complaint, the rubber plantation operators with IFC financing have violated Cambodian and international laws and the World Bank's own social and environmental safeguard policies. The indigenous communities claim that the companies' operations caused the "illegal seizures of their farming and grazing land and destruction of their forests and sacred sites" (IDI 2014). The same rubber plantation firms were also implicated in alleged cases of human rights violations of local communities in Laos, as reported by Global Witness. Violations reportedly included violence, harassment, and forced evictions (Global Witness 2013).

Similar cases of IFC investments in financial players involved in projects that reportedly harmed farming and indigenous communities, grabbed or destroyed their lands and resources, and violated their human rights have been reported in other countries as well, such as Uganda, India, and Honduras (Bretton Woods Project 2014). (See Table 2.)

**Table 2.: Examples of IFC investments in financial intermediaries that harmed farming and indigenous communities**

| Country  | Private company              | IFC involvement through financial intermediaries  | Summary of case  |
|----------|------------------------------|---|--|
| Uganda   | New Forest Company (UK)      | US\$7-million investment in private equity fund Agri-Vie, whose portfolio includes New Forest Co.   | Eviction of 20,000 villagers in Uganda to make way for New Forest's plantations  |
| India    | GMR Kamalanga Energy Limited | US\$100-million IFC investment in private equity fund India Infrastructure, which is also financing GMR Energy's coal-fired Kamalanga power plant | Pollution and water shortage, inadequate compensation of acquired lands, and intimidation and use of force against affected communities in the State of Odisha |
| Honduras | Dinant                       | Aside from its direct investment in palm oil producer Dinant, IFC also invested in FICOHSA, a commercial bank affiliated with Dinant              | Dinant has been accused of involvement in the killing and eviction of farmers in the Bajo Aguan region   |

Source: Bretton Woods Project 2014.

Aside from directly investing in private companies that have been involved in land conflicts with peasant and indigenous communities, the World Bank also guarantees private investments that have been linked to land and resource grabbing. To illustrate, MIGA collaborated with the US Overseas Private Investment Corporation to set up a US\$350 million political risk facility to support agribusiness investments in Sub-Saharan Africa. The project includes a guarantee for the investments made by the Silverlands Fund, a Luxembourg-based private equity fund that has been accused of financing land grabs (Cruz & McCourtie 2014).

In terms of policy setting, the World Bank has favoured agricultural policies and programs that land activists and affected communities claim to have resulted in the corporate takeover of farmlands and the displacement of small food producers. It has been noted that the share of World Bank activities on “advisory services” to “client governments” through its Investment Climate (IC) department has been growing. From an average of US\$3.3 billion per year in 2000 to 2008, IC-related funding ballooned to US\$8 billion in 2009 alone. IFC and MIGA, as well as private corporations through the FIAS, are funding the IC unit. Consistent with its action plan, the FIAS is also giving increased attention to agribusiness. In the FIAS 2012–2016 strategy, the World Bank aims to “support the removal of binding constraints to the proper functioning of agribusiness markets” and to promote “tax administration and fiscal incentive policies for agribusiness.” To implement reforms, the IC department offers loans, advice, and technical support for governments (Cruz & McCourtie 2014).

Among the most recent initiatives of the World Bank that is causing concern for activists and advocates is the Enabling the Business of Agriculture (EBA) program. It focuses on “identifying and monitoring regulations and policies that affect agriculture and agribusiness markets.” The objective is “to inform and encourage policy decisions that support inclusive participation in agricultural value chains and foster an environment that is conducive to local and regional business in agriculture” (World Bank 2016).

Critics point out that the EBA will implement the World Bank’s “ease-of-doing-business” rankings to the agricultural sector. Launched in 2014 and with funding support from USAID, the UK’s Department for International Development (DfID), the Dutch and Danish governments, and the Gates Foundation, the program is being piloted in Ethiopia, the Philippines, Guatemala, Rwanda, Morocco, Spain, Mozambique, Uganda, Nepal, and Ukraine. By 2015, 30 countries, including several Asian countries such as Cambodia, Laos, Sri Lanka, and Vietnam, will be added to the project. The ease-of-doing-business rankings give high points to countries that create the most favourable climate for corporations, including “smoothing the way for corporations’ activity in the country by, for instance, cutting administrative procedures, lowering corporate taxes, removing environmental and social regulations or suppressing trade barriers” (Jones 2014). Thus, the EBA creates the pressure for developing countries to implement further reforms that will ease business operations in agriculture to attract more private, including foreign, investments in the sector.

Meanwhile, even the so-called climate-smart agriculture being promoted by the World Bank is seen by some cause-oriented groups, like the Institute for Agriculture and Trade Policy (IATP), as paving the way “for agribusiness greenwashing while undermining agroecological solutions to climate change.” Climate-smart agriculture is being pushed by the World Bank, together with countries led by the US, agribusiness interests, and some civil society groups through the Global Alliance for Climate Smart Agriculture (GACSA). However, critics say that “with a murky governance structure, no solid criteria or definitions for what climate smart agriculture is or isn’t, and heavy corporate influence, GACSA appears to be more of a marketing campaign than a positive way forward for agriculture in the age of climate change” (Lilliston 2015).

## 2. Impact of increasing private investments in agriculture

Increased investor and donor interest in food commodities, land, natural resources, and agriculture production gave rise to unprecedented speculation in food and agriculture and the subsequent land rush and increases in land and food prices. This has had tremendous implications in food security, communities, rural economy, and the economy as a whole. The most documented impacts are on the aspects of food sovereignty.

### *Real and profound impacts*

Increases in food prices are problematic because they are not at all based on increased incomes, population growth or production problems. In other words, inflation in this case does not have concrete and doable solutions.

Food prices are increasing along with fuel prices, since the links between food and energy have become more intimate with the commodity index fund. Concretely, oil prices are linked with commercial agriculture that is dependent on the use of petroleum-based chemicals such as pesticides and fertilizers. Food prices also increase along with oil prices, since oil and petroleum products are used in food production, transportation, processing, as well as inputs (Guzman 2011:34).

The commodity index fund has also been responsible for increasing prices of agricultural products, even if these are not included in the index basket. Agricultural markets are extremely narrow and interdependent, so that trends in wheat (which, for instance, is bundled in the commodity index) affect movements in other cereals, such as corn and rice (which is not part of the commodity index). Both the World Bank and the FAO have research confirming that at times, the increases in rice prices are caused by increases in wheat prices (Guzman 2011:37).

Meanwhile, investments in farmland derivatives also raise food prices as land deals are happening in two unrelated markets: the commodities market and the land market, whose values move just by the amount of capital invested in the exchanges. The export orientation or focus on global markets of related food and agricultural production also adds to undue increases in local food commodity prices.

Food inflation affects underdeveloped countries in profound ways, since they have implemented extensive globalization policies. These countries have liberalized agricultural imports under the WTO regime, which would increase their food import bills, and to an unwarranted degree during food price increases, such as what transpired in 2008.

Another reality that underdeveloped countries face is the monopoly of local traders, which apparently strengthened under neoliberal globalization instead of reversing it through the promise of healthy competition. This monopoly aggravates the food inflation that the price speculation by transnational corporations and financial firms creates. It has been observed that the pass-through of global prices is extremely high in underdeveloped countries in the phase of rising prices, but is not evident in the phase of falling prices. High food prices tend to stay in underdeveloped countries, even if global prices have already gone down compared to the peak in 2008. This has tremendous impact on the cost of living and general inflation. In underdeveloped countries, central banks often increase interest rates, while employers freeze wages in the event of these price spikes (Guzman 2011:39).

Apart from food inflation, one fundamental problem aggravated by speculation is the increase in input costs. This has further aggravated farmers' bankruptcies. The FAO observes that the ratio of output to input prices – an indicator of farmers' profitability – declined in the last decade, yet did not have corresponding decreases in productivity and farmgate prices. It was also observed that when the ratio declined sharply in 2007, the increases in the prices of input were passed on fully and quickly to the farmers.

On the other hand, increases in land prices are problematic not so much because of the ripple effects on production costs, but more fundamentally on the rapid commodification of natural resources. Investors have tightened control of production – a phenomenon that has created a global market of land and water rights. The result is the emergence of a new bubble, according to De Schutter, since investors cash in without understanding the long-term prospects or without any solid development project, and on an evident speculative activity (2011a:253).

The land rush is restructuring the entire agricultural landscape of underdeveloped countries and, at its core, is a human rights issue. A study published by the Pesticide Action Network-Asia-Pacific (PANAP) shows that cases of land grabs in five Asian countries – Indonesia, Malaysia, Pakistan, Philippines, and Sri Lanka – are replete with human rights violations. Legality is tilted in favour of foreign investors, where there are minimum international standards, breakdown of trade barriers, and changes in the environmental and labour laws. Multilateral institutions are also given the hand to intervene in national laws in favour of FDI (PANAP 2013:5).

Water rights have shifted from the traditional users to the foreign or corporate users in all cases. Food security, along with water security, has been immediately and directly threatened. Environmental destruction and degradation has occurred, whether from building of infrastructure on natural habitats, use of inorganic chemicals in farming, deforestation, and commercial farming. Violation of labour rights is evident, even involving violation of the political rights of workers (Guzman 2015).

Meanwhile, the introduction of PPPs as a platform to facilitate private capital in agriculture is contributing profoundly to the restructuring of Third World agriculture. A discussion paper by the People's Coalition on Food Sovereignty (PCFS) concludes that the most immediate impact of PPPs in agriculture is the introduction of user fees, wherein farmers have to pay for public resources where there was no fee before. This is most evident in the areas of infrastructure (farm-to-market roads, markets, and water for irrigation), seeds, and technology. This has escalated the marginalization of farmers from access to public resources and at the same time has physically displaced several farming communities (PCFS 2015).

PPPs in agriculture, especially in innovation or research and development, is also introducing the regime of intellectual property rights (IPR), which facilitates the patenting of public resources in a host country but prevents technology from being transferred. The host country also has to pay for IPRs and patents to the transnational corporations that hold the rights to these.

In all agricultural PPPs, host governments have shelled out or invested large amounts of national budgets to implement the partnership. In numerous cases, the states have invested much more than they could afford, especially with the facilitation of IFIs and donors. This has resulted in increased debts and taxes that are shouldered by the general public (PCFS 2015:10).

PPPs in direct agricultural production likewise have a long-term impact on farmers' control of their production and communities. These types abound with cases of displacement of communities,

according to the PCFS paper. PPP projects also organize smallholder farmers into contiguous farmers' groups and place them under contractual arrangements. Most of the time, the contract grower is subjected to strict product and marketing standards, and is forced to use the land as collateral in case of market failures. In short, contract growing can serve as the instrument of eventual land and other resource grabs by the private corporations. Free use by the transnational corporations of other natural and genetic resources is also often stipulated in the contracts.

### *Regulating agricultural investments?*

It is within the context of increasing private capital in farmlands amid social, environmental, and human rights issues that prompted moves to regulate agricultural investments. The most prominent was the Principles for Responsible Agricultural Investment that Respect Rights, Livelihoods, and Resources (PRAI). It was formulated in 2010 by an inter-agency working group led by the World Bank with IFAD, UNCTAD, and FAO. However, critics pointed out that PRAI merely legitimizes land grabbing by providing a set of principles that investors may voluntarily observe when acquiring farmlands. Even the UN Special Rapporteur on the Right to Food criticized the PRAI for being "woefully inadequate." The PRAI was also "undemocratically" crafted, with various stakeholders left out of its formulation (GRAIN 2011).

Civil society organizations questioned PRAI, which resulted in a supposedly more inclusive process to discuss the principles (called the "rai") at the Committee on World Food Security (CFS) starting in 2012. In October 2014, the CFS endorsed the rai principles, defining responsible investment in agriculture and food systems as "the creation of productive assets and capital formation, which may comprise physical, human or intangible capital, oriented to support the realization of food security, nutrition and sustainable development, including increased production and productivity" (CFS 2014).

For the World Bank and others, "a win-win situation vis-à-vis investment performance and their wider positive economic, social and environmental impact is achievable." The key is addressing through regulation the negative impacts linked to investments, especially those that involve land acquisition. These include the conflict between the formal rights granted to investors and informal rights of communities; lack of clarity on the conditions and process for land acquisition; lack of consultation, including on resettlement; and lack of assessment and monitoring of environmental impact (Mirza & Speller 2014).

This resolution, however, tends to overlook the more fundamental question of whether large-scale investments are needed or if they are consistent with the specific development needs of affected local communities. This is particularly evident in cases where customary lands of indigenous communities are the targets of land investments. The issue then goes beyond just reconciling conflicting land claims, etc., as it involves the culture and way of life of a particular group of people. In this regard, the issue of effective control over land and other resources is also sidestepped. Consequently, it ends up legitimizing the same agricultural policies and programs that are being questioned due to their impact on poor farmers and other small food producers.

The CFS-approved rai "contradicts itself by saying that the 'rai and the food systems should be consistent with international agreement related to trade and investment.'" It is also premised on "relevant multilateral WTO agreements as one of the many foundations for responsible investment in agriculture and food systems." It also promotes public-private partnerships while failing to place due emphasis on the rights of small food producers. For critics, this deprives small farmers of an outright protection against land and resource grabbing that are perpetrated by large corporate investors (PANAP 2014).

The rai principles and other efforts to regulate investments are voluntary self-regulation, often in the context of corporate social responsibility (CSR) publicity, even as corporations push for legally binding instruments to protect their investments.

Indeed, after the failings of the rai are new-generation and high-standard trade and investment agreements like the Trans-Pacific Partnership (TPP) deal. The deal institutionalizes the so-called investor-state dispute settlement mechanism. TPP opponents argue that “big foreign investors in agriculture are given far-reaching protection while undermining the state’s mandate to regulate investments such as those that lead to land and resource grabbing” (PANAP 2015). Corporations become even more powerful than states through the use of unaccountable international arbitration tribunals where they can sue national governments over issues such as rescinding land deals that violate native customary rights or result in the economic and physical displacement of rural communities.

### 3. Financialization of Asian agriculture

Two thirds of the world's poor and 63 percent of the world's hungry reside in Asia and the Pacific. Institutions like the FAO and the ADB cite the poverty and hunger situation in the region to explain the focus of agricultural investment on Asia. This is ironic for what is considered to be the fastest-growing and food-producing region (IBON Foundation 2015).

#### *"Asia Pacific century"*

Demand and supply factors are being presented as reasons for investing in food and agriculture in Asia. There will be around 5.2 billion people in the region by 2050, according to the ADB; this will increase food demand by 70 percent. Meanwhile, supply is beset with 43 percent of land being degraded, 80 percent of water consumed by irrigation, 35 percent harvest losses, and a fragmented supply chain (ADB 2013).

The region is also vulnerable to steep food inflation, since the bulk of the population's expenses is still on food. Food price changes are estimated to have increased the number of poor by 124 million in 2008 and by 140 million in 2010.

The region also sits on numerous natural hazards, where the impacts of disaster risks on poverty are tremendous. Absolute poverty increased by 394 million in 2008 and by 418 million in 2010 (Ghosh 2014).

According to the ADB, when food prices and disaster risks, including impacts of climate change and global economic shocks, are incorporated into the poverty debate, Asia's 2010 poverty incidence would be further raised to nearly half the population. This means that there were almost 1.75 billion people in extreme poverty in Asia in 2010, and not the reported 733 million (IBON Foundation 2015).

The investment focus on Asia is better understood, however, in the context of the "Asia Pacific century," a term being used to describe the shifting interest towards the region. Asia has had the fastest growth in the world in the last 20 years, and Asia's exports growth rate is far above that of the rest of the world (IBON Foundation 2015).

The investors' and the banks' keen interest in Asia and the Pacific is clearly because of the vast potential of the region in providing greater profit opportunities for investors and donors. Asia accounts for half of the global labour force and offers the cheapest wage rates, land and natural resources, as well as infrastructure. The region has among the lowest tariffs and most liberalized environments for foreign investments, maintained through national policies and bilateral, regional, and multilateral trade and investment agreements. Furthermore, Asian governments have weak regulatory systems, especially for land, natural, and genetic resources, which facilitate the various financial placements by foreign investors.

#### *The phenomenon in Asia*

According to the fDi Markets database, Asia was the second most important destination of agricultural investment flows during 2003 to 2011, next to Europe being both the best source and destination. Institutional investors in food and agriculture in Asia are oriented towards inputs, services, food processing, and infrastructure through private equity strategies.



However, this is not an indication that the private equity funds in Asia do not invest in farmland assets or that the large companies, whether domestic or foreign, do not possess vast land holdings. Moreover, this does not mean that Asia in recent years has been exempt from the same global phenomenon of land grabs. The region is, in fact, also host to controversial PPP projects in food and agriculture.

Much of the secondary literature on land grabbing is focused on Africa. The quantity of land implicated in Asia is relatively less than in Africa, but it is still significant in the global context. In some specific countries (e.g., Cambodia, Indonesia, Philippines, Malaysia), it represents a major development problem (Borras & Franco 2011:15).

The World Bank data on potential land availability further shows that more than China, Indonesia accounts for 62 percent of the potential land, with 47.2 million hectares. The principal crops targeted are oil palm (most significant in Southeast Asia) and wheat (high expectations for Southeast Asia, but also significant for South Asia). Others include maize, sugar cane, and soybeans (Guzman 2015).

Current land transactions are not new in Asia; they remain in the historical context of feudalism and in the spirit of neoliberal restructuring of agriculture. This time, however, the land transactions are brought about by the heightened financialization of food and agriculture. They are new in the sense that public resources are transferred to private profits by strengthening the forms of foreign control over natural resources, such as joint venture, contract growing, or PPPs.

The World Bank's emphasis on responsible agricultural investment is designed to maintain the momentum of the land rush. But the debate has also centred on whether indeed Asia needs large investments. In various countries across the region, the simple redistribution of land to small farmers is in fact more favourable and beneficial. Land availability is finite and shrinking, in reality, and opportunity costs of ceding land to foreign investors can be high. As noted by the UN Special Rapporteur on the Right to Food, landlessness in South and Southeast Asian countries such as India, Bangladesh, Cambodia, Philippines, and Thailand is increasing because of population growth as well as the acquisition of land by local elites and foreign investors (Guzman 2015:4).

Farmers in Asia have been marginalized to small plots, while decades of inorganic farming methods have degraded the land and decreased productivity. At present, several land-grabbing cases in the region involve the clearing of forests to expand cultivated areas, raising opportunity costs further. These realities in the region's agriculture are clearly challenges that huge agricultural investments and large-scale land use will not address.

### *Climate as justification*

The ADB and the World Bank are pushing for the expansion of co-financing to leverage additional investments for Asia (ADB & Routledge 2014).

One interesting development in financing is the rise of so-called climate risk insurance, which the World Bank has initiated. Banking on Asia's high vulnerability to climate-related disasters, the World Bank, FAO, the ADB, and other multilateral organizations are promoting the idea of a climate-smart agriculture.

The World Bank's Action Plan outlines scaled-up investments of up to US\$30 billion and prioritizes climate-smart agriculture. However, the action plan approaches this in relation to the development of drought and food-resistant seed varieties. The World Bank has an alliance with the Consultative

Group for International Agricultural Research (CGIAR), a partnership of 15 international centres and five major collaborative programs, which goes all the way back to the time of the Green Revolution. It has also prioritized genetically modified (GM) crops, hybrids, high-input seeds, as well as irrigation-dependent technologies (Holt-Gimenez, Williams & Hachmyer 2015:6).

Donor organizations emphasize that adaptation measures to climate change in Asia and the Pacific should include changes in agricultural practices and water management towards climate resilience. These require technological fixes, risk management, and crop insurance. Biotechnology and genetic modification, according to the ADB, will be an essential component to biotic and abiotic stresses related to climate change, such as drought, heat, salinity, pests, and disease (ADB 2009:9).

On the other hand, greater variability in weather and production outcomes, according to the donors, will require attention to risk-sharing and risk-reducing investments. Such investments include financial market innovations, weather-based crop insurance, and broad-based social safety nets. Finally, donor organizations propose an open trading regime to support this. The ADB is also promoting contract farming to facilitate smallholder farmers to the export markets. The private sector as lead is underscored (ADB 2009:10).

Specifically in Asia and the Pacific, the ADB is supporting the creation of regional funding modalities. The main scheme in the region both for adaptation and mitigation is the Climate Change Fund, with an initial contribution of US\$40 million. Insurance and reinsurance industries have started to engage; the most advanced initiatives are by two global companies, Munich Re and Swiss Re. Their products include micro-insurance, weather and crop insurance, and other mechanisms like risk pooling and disaster-related bonds (ADB 2009:15).

On the other hand, the World Bank's major initiative is the Global Index Insurance Facility, which offers insurance to farmers vulnerable to catastrophic weather and gives payouts to policy-holding farmers whenever environmental measures exceed specified thresholds. Unlike traditional crop insurance, it is not based on agricultural performance and thus does not have costly verification processes and can be cheaper for farmers.

World Bank's financing is increasingly being channeled through IFC, which in turn channels it to Fis and private businesses. The Global Index Insurance Facility is housed within the IFC, which is partnering with global seed and agri-chemical corporations such as Syngenta in rolling out the insurance schemes in Kenya, Rwanda, and Tanzania (Holt-Gimenez, Williams & Hachmyer 2015:15).

A study by Food First shows that as farmers access a new form of insurance, they exhibit riskier behavior and borrow more to buy chemical inputs and the so-called improved seed varieties. They also tend towards monocropping, which in the end will only make them less able to adapt to changing ecology. Insurance schemes and the financialization of agriculture will only undermine traditional risk-pooling agreements and other social safety nets. Financialization has in fact made them less resilient.

But the apparent point for the World Bank is to channel further agricultural resources to corporate profits by allowing third-party Fis such as banks to invest, as facilitated by the IFC. Even within the IFC, employees are not working towards avowed goals of climate-smart agriculture or any other relevant objectives. An internal survey found that only 30 percent of the IFC staff thought of development as their primary goal (Holt-Gimenez, Williams & Hachmyer 2015:23).

## ADB and agriculture

The ADB has already funded hundreds of agriculture and natural resources (ANR) projects in its almost five-decade history. Through its work on ANR sector development, the bank claims to have helped the region achieve food security (World Food Programme 2016).

In addition, ANR has become less of a focus for the ADB, with its support for the sector falling significantly in the past 30 years. From an average of 27 percent of its total loan portfolio in 1981 to 1990, the number went down to 11 percent in 1991 to 2000, and further declined to 7 percent in 2001 to 2011. According to the bank, “the change in emphasis was related to the rapid increase in lending investment in other sectors, while absolute investment in ANR remained static” (Sahai et al. 2015). In 2014, ADB loans and grants for ANR (and rural development) was just less than 1 percent of the total. To compare, the energy sector cornered almost 42 percent (Hasan et al. 2015).

Recently, however, the ADB has begun to give more focus to ANR. In the midterm review of its ADB Strategy 2020 – developed in 2008 to set the bank’s long-term strategic framework – one of the recommendations was to place increased emphasis on food security and agricultural productivity. To meet this goal, in September 2015 the ADB issued its Operational Plan for Agriculture and Natural Resources: Promoting Sustainable Food Security in Asia and the Pacific 2015–2020.

The bank projects a substantial rise in its support for the ANR sector. For 2015 to 2017, for instance, the ADB says it has approved 67 projects worth US\$6.85 billion. The number of projects increased by 86 percent from 2012 to 2014, with its total amount rising from 182 percent. (See Table 3.) Overall, the ADB is committing annual funding support of at least US\$2 billion to address country-specific and regional constraints to food security and to reduce the vulnerability of poor populations to food price increases. Note, however, that not all these will be spent in the ANR sector.

**Table 3. ADB operations (sovereign) in agriculture and natural resources, 2012–2014 and 2015–2017 (Amount in US\$ millions)**

| Subsector   | 2012–2014          | 2015–2017 | 2012–2014          | 2015–2017 |
|---|--------------------|-----------|--------------------|-----------|
|   | Number of projects | Amount    | Number of projects | Amount    |
| Irrigation, agricultural drainage, & rural flood protection | 18                 | 1,326.96  | 21                 | 2,782.8   |
| Rural market infrastructure                                 | 4                  | 202       | 5                  | 182       |
| Agribusiness & value chain                                  | 4                  | 96.5      | 10                 | 796.8     |
| Agriculture production & support                            | 2                  | 76        | 5                  | 459.9     |
| Natural resources management                                | 8                  | 725.17    | 24                 | 2,473.83  |
| Food safety & quality                                       | -                  | -         | 2                  | 153       |
| Total   | 36                 | 2,426.63  | 67                 | 6,848.33  |

*Source: Operational Plan for Agriculture and Natural Resources: Promoting Sustainable Food Security in Asia and the Pacific in 2015–2020, ADB.*

Among the major shifts envisioned in the new ADB plan is the deepened support for ANR and food security by its Private Sector Operations Department (PSOD). Such support includes greater agribusiness investment and PPPs. Prior to the plan, PSOD projects in ANR comprise just 5 percent of its total investments, based on its 2013 data. PSOD is the ADB unit that “funds investments in

privately held and state-sponsored companies” with “emphasis on commercially viable transactions that generate financial returns” (ADB 2015a).

But beyond more funding for agriculture and food security, the basic issue with the ADB is the policies and programs that it supports. The ADB Strategy 2020 and the operational plan for ANR, for instance, are advancing privatization and corporatization that have a long track record of harming the poor. Among the major components of the ADB Strategy 2020 is increased funding for private sector development and operations from 12 percent in 2007 to 50 percent by 2020.

The ADB has tasked its PSOD and its Office of Public-Private Partnership to “work more closely together to integrate and synergize sovereign and non-sovereign operations and promote more PPPs” in the ANR sector. Among the financial instruments that the PSOD will employ are a) partial risk guarantees to banks lending to farmers, b) supply chain finance, c) dedicated and experienced agribusiness private equity funds with successful track record in food and agribusiness investments, d) project finance to well-structured PPP projects, and e) direct equity investments in agribusiness companies that have long-term financial viability prospects and have the potential for scalable impact (Sahai et al. 2015).

Under the plan, it is seen that the PSOD’s “current level of 2–3 investments for about US\$250 million annually will gradually increase to 4–6 investments for about US\$500 million annually by 2020 (including both financial intermediary and direct investment assistance, and with increasing PPPs)” (Sahai et al. 2015).

Aside from providing sovereign loans and grants and directly investing in private agribusiness and PPP projects through the PSOD, the ADB will also continue to shape ANR policies in “developing member countries.” According to the ADB, its efforts on improving physical infrastructure and financial investments need to be backed up by “enlightened sector policies.” The bank intends to do this through program lending, sector lending, results-based lending, or multi-tranche financing.

This means tying up access to ADB funding to specific policy conditionalities, as has long been the bank’s practice. Such policy conditionalities are often in support of neoliberal restructuring of agriculture. Aside from privatization and corporatization, the ADB has been explicit in its operational plan that trade facilitation and trade liberalization are integral parts of its strategy.

## **4. World Bank and ADB:**

### **Facilitating corporate takeover of Philippine agriculture**

Investments in agriculture have been specifically substantial in the region. Their impact on the economy, food security, and rural communities is particularly descriptive in the Philippines, where the presence of both the World Bank and the ADB is significant.

In the phenomenon of financialization, the role of the World Bank, ADB, and other multilateral institutions has further expanded to influencing financing mechanisms that would allow the private sector to be directly involved in agricultural production.

#### *Financing Philippine agriculture*

From a minimal annual average of 4.4 percent in the 1980s, the share of agriculture to overall government spending in the Philippines declined further to 3.5 percent in the 1990s, recovered slightly to 4.5 percent in the 2000s, and further to just 4.8 percent in the 2010 to 2014 period. The yearly growth in agricultural government spending has been steadily shrinking in the past three decades – from 17 percent in the 1990s to 14.6 percent in the 2000s to only 10.8 percent in 2010 to 2014. Agricultural spending in 2014 reached Php112 billion.

Public investments also appear to be lacking compared to the sector's actual needs. A case in point is the investment requirements mandated by the Agriculture and Fisheries Modernization Act (AFMA) of 1998, which is supposedly a comprehensive blueprint for agriculture modernization and rural development through the introduction of modern technology, increasing availability of rural financing, increasing investments in agricultural infrastructure, improving the links between farmers and markets (both domestic and international), and others (Senate of the Philippines 2009).

Inadequate funding has beset AFMA's implementation. The Senate Economic and Planning Office (SEPO), citing the 2007 official assessment of AFMA, said that while the law mandates a total of Php181.4 billion (about US\$3.87 billion) from 1999 to 2005 for AFMA, actual appropriations during the period reached only Php120.1 billion (US\$2.56 billion). Insufficient public spending apparently continues to weigh down AFMA, as noted in a March 2015 hearing of the Philippine Senate's committee on agriculture and food, with the chair calling for a review of the law (Pilapil 2015).

Access to credit as a source of agricultural financing is also lacking. While agricultural production loans have risen in absolute terms, its annual expansion has steadily decelerated since the 1990s. From an annual growth rate of an already modest 0.67 percent in the 1990s, the figure has slowed to 0.06 percent in the 2000s and further down to 0.03 percent in the 2010 to 2014 period. Agricultural production loans in 2014 registered Php246 billion.

Data from the Philippine Statistical Authority (PSA) show that as of 2014, private commercial banks are the biggest provider of loans, although their share has been decreasing slowly. The share of private banks went down to 84.6 percent in 2014; rural banks came next with a share of 24.2 percent. Meanwhile, specialized government banks, such as the Land Bank of the Philippines (LBP), improved their share to 15.4 percent. The volume of loans provided by private and government banks increased in 2014, but at a slower rate compared to the previous year, expanding by 11.2 percent as compared to 19 percent in 2013 (Torres 2015).

With limited public resources as well as commercial credit available, government continues to depend on external sources such as official development assistance (ODA) from bilateral and

multilateral donors, including the World Bank and the ADB, to fund agricultural and rural development in the country. From 2000 to 2013, the local agricultural sector received a total of US\$935.99 million from all sources. However, a majority of ODA is in the form of loans, comprising 60 percent of the total, while grants comprise 40 percent (NEDA 2015).

According to the national economic planning agency, net ODA commitments for agriculture in 2014 reached US\$128.06 million. Including agriculture and agrarian reform, environment and natural resources, and irrigation, the amount could reach US\$1.62 billion (NEDA 2015).

The Philippine government has been actively attracting foreign investments in agriculture as the viable source of external financing. As of 2015, approved foreign investments in agriculture were pegged at almost Php8.51 billion, as compared to just Php536.7 million (about US\$11.42 million) for all of 2014. Agriculture received the fifth-highest foreign investment, accounting for 3.5 percent of the total approved foreign investment in 2015. (PSA 2016).

The increasing financialization of agriculture opened up new opportunities for foreign corporations to expand and deepen their presence in Philippine agriculture amid barriers such as constitutional restrictions on foreign ownership of land, among others. A case in point is Cargill, which has used its own private equity arm, Black River Asset Management, in acquiring additional agricultural lands in Mindanao by investing in the local food exporter Agrinurture Inc. (Salerno 2014). In 2011, Black River bought a 28.11-percent stake in Agrinurture for US\$30.45 million, which it increased in 2013 to 30.92 percent with an additional Php355 million (around US\$7.13 million) (Rivera 2013). With investments from the Cargill-controlled private equity fund, Agrinurture, owned by a Filipino-Chinese businessman, has started targeting lands for banana, rice, and oil palm plantations in Mindanao through contract growing and lease arrangements, initially pegged at around 1,400 hectares (Salerno 2014). Aside from Cargill, Agrinurture has also been partnering with agribusiness firms from China and Saudi Arabia for farming ventures in the Philippines that plan to cover more than 60,000 hectares for export production of rice, fruits, and vegetables (GRAIN 2012).

The expansion and deepening of private foreign investment in Philippine agriculture through Fis reflect the global trend of increasing private equity investment in agribusiness, especially in emerging Asia. From an annual average of approximately US\$1 billion from 2008 to 2013, private equity in agribusiness ballooned to US\$2.6 billion in 2014, largely due to deals in the region (Credit Suisse 2015). The biggest private equity firm involved in these agribusiness deals is Cargill's Black River Asset Management, which has raised some US\$1.16 billion in private equity funds in Asian agribusiness deals, including in the Philippines, from 2008 to 2014 – about 17 percent of the global total.

### *World Bank in the Philippines*

In the Philippines, the World Bank does not have third-party investments in Fis or direct investments in companies involved in agricultural projects that are as controversial as those in Cambodia and others, at least based on desk research done for this study. But with the World Bank turning more and more to financial players for investments and to raise resources, the Philippines and its agricultural sector have not been spared the World Bank's ever-increasing bias for private corporate interests, often at the expense of small farmers and other marginalized rural sectors.

The World Bank has long been one of the Philippines' leading development partners. In 2014, for instance, the World Bank was the leading source of official foreign development loans, accounting for almost 40 percent of the total (NEDA 2015). With its financial clout, the World Bank has played a strategic role in the neoliberal restructuring of the Philippine economy, including agriculture,

through policy conditionalities attached to its loans as well as through its grants and technical assistance.

It was the World Bank, for instance, that primarily funded the Green Revolution in the country under the Marcos dictatorship's Masagana 99. Almost one fourth of total World Bank lending to the Philippines went to agriculture when the Masagana 99 was launched in 1973. Critics of the program claim that Masagana 99 eventually pushed farmers into complete dependence on imported and expensive pesticides and fertilizers, causing their indebtedness and bankruptcy.

In tandem with the International Monetary Fund (IMF), the World Bank supported structural adjustment programs (SAPs) in the Philippines. A US\$300 million World Bank loan in 1983 was used to eliminate credit subsidies in agriculture, liberalize the sugar and coconut industries, encourage the exportation of rice and corn by the private sector, streamline government's agricultural agencies, and dismantle price controls on rice and corn, among others.

Aside from introducing neoliberal reforms in the Philippine agricultural sector, the World Bank also shaped the country's controversial Comprehensive Agrarian Reform Program (CARP) through its promotion of market-assisted land reform. According to the World Bank, market-assisted land reform can "produce genuine benefits where the political situation does not permit redistribution through other models," including government expropriation. Today, it is estimated that nine out of 10 supposed farmer beneficiaries of CARP are still landless, while a third could not afford the amortization under the market-assisted land reform model espoused by CARP. Land reconcentration is widespread, considering that 76 percent of farmer beneficiaries have stopped paying the amortization and thus risk losing their land (Olea 2015).

World Bank commitments for agricultural projects approved between 2002 and 2014 averaged US\$148.91 million, compared to just US\$86.42 million for approved projects between 1990 and 1999. (See Table 4.)

| <b>Table 4.: World Bank commitments in the Philippine agricultural sector<br/>(Amount in US\$ millions)</b> |               |                      |
|---|---------------|----------------------|
| <b>Active</b>   | <b>Amount</b> | <b>Approval year</b> |
| Philippine Rural Development Project  | 501.25        | 2014                 |
| Philippine Rural Development Project  | 7.00          | 2014                 |
| Governance Reforms Supporting Frontline Agricultural Services and Investments                               | 3.00          | 2012                 |
| Participatory Irrigation Development Project  | 70.36         | 2009                 |
| <b>Pipeline</b>   |               |                      |
| Inclusive Partnerships for Agricultural Competitiveness   | 100.00        | -                    |
| HARVEST PROJECT   | 130.00        | -                    |
| <b>Closed</b>   |               |                      |
| PH – Additional Financing for the Second Agrarian Reform Communities Development Project                    | 10.00         | 2009                 |
| Philippines GFRP DPO  | 200.00        | 2008                 |
| GEF Program supporting the National Program for Environment and Natural Resources Management Project        | 7.00          | 2007                 |
| National Program Support for Environment and Natural Resources Management Project                           | 50.00         | 2007                 |
| Mindanao Rural Development Project – Phase 2  | 83.75         | 2007                 |
| Diversified Farm Income and Market Development Project  | 60.00         | 2004                 |
| Second Agrarian Reform Communities Development Project  | 50.00         | 2002                 |
| Mindanao Rural Development Project (APL)  | 27.50         | 1999                 |

|   |        |      |
|---|--------|------|
| Mindanao Rural Development Project (GEF)                      | 1.25   | 1999 |
| Community Based Resource Management Project                   | 50.00  | 1998 |
| Szopad Social Fund Project                                    | 10.00  | 1998 |
| Agrarian Reform Communities Development Project               | 50.00  | 1996 |
| Conservation of Priority Protected Areas                      | 22.90  | 1994 |
| Irrigation Operation Support Project (02)                     | 51.30  | 1993 |
| Environment and Natural Resources Sector Adjustment Project   | 224.00 | 1991 |
| Communal Irrigation Development Project (02)                  | 46.20  | 1990 |
| Small Coconut Farms Development Project                       | 121.80 | 1990 |
| Agricultural Credit Project                                   | 100.00 | 1985 |
| Agricultural Sector – Input Loan Project                      | 150.00 | 1984 |
| Central Visayas Regional Project – CVRP                       | 25.60  | 1983 |
| National Fisheries Project                                    | 22.40  | 1982 |
| Livestock – Fisheries Project (03)                            | 45.00  | 1980 |
| Rainfed Agricultural Development Project – Iloilo             | 12.00  | 1980 |
| Samar Island Rural Development Project                        | 27.00  | 1979 |
| Small Farmer Development Project – Land Bank                  | 16.50  | 1978 |
| National Extension Project                                    | 35.00  | 1978 |
| Rural Infrastructure Project                                  | 28.00  | 1978 |
| Rural Development Project (02) – Land Settlement Project (01) | 15.00  | 1977 |
| Rural Credit Project (04)                                     | 36.50  | 1977 |
| Fisheries Credit Project (02)                                 | 12.00  | 1976 |
| Grain Processing Project (02)                                 | 11.50  | 1976 |
| Livestock Project (02)  | 20.50  | 1976 |
| Mindoro Rural Development Project                             | 25.00  | 1975 |
| Rural Credit Project (03)                                     | 22.00  | 1974 |
| Fisheries Credit Project                                      | 11.60  | 1973 |
| Livestock Project   | 7.50   | 1972 |
| Rice Processing and Grain Storage Project                     | 14.30  | 1971 |
| Rural Credit Project (02)                                     | 12.50  | 1969 |
| Agriculture Project   | 5.00   | 1965 |
| <i>Source: The World Bank Group</i>                           |        |      |

As of August 2015, the World Bank's (IBRD-IDA) total Philippine portfolio is made up of 15 active projects with a total commitment of US\$2.8 billion. It covers rural development along with infrastructure, social protection, health, basic education, and environment. The biggest active loan is the US\$501.25 million Philippine Rural Development Project (PRDP), which aims to increase rural incomes and enhance farm and fishery productivity in targeted areas by supporting smallholders and fishers to increase their marketable surpluses and their access to markets (World Bank 2013b). The PRDP is the single-largest loan approved by the World Bank for the agricultural sector in the history of its lending in the country.

Meanwhile, the IFC also has three active agriculture projects in the country for advisory services, with a combined worth of US\$9.15 million. The first one is the US\$3.29 million Philippine Agribusiness Trade Logistics (approved in 2012). The initiative is an IC project of the IFC that aims "to improve food security as well as increase and diversify agri-food exports via regulatory and administrative reforms linked to agribusiness-related trade and logistics." Among its activities is to enhance and simplify importing and exporting procedures, processes, and documents to facilitate agricultural trade (IFC 2013b).

Another is the US\$1.03 million PPP Grains (approved in 2012), wherein the IFC has been appointed as co-transaction advisor with the LBP to provide advisory services to the Department of Agriculture



(DA) to structure and competitively tender and award the sale of 11 yellow corn Post Harvest Processing and Trading Centers (PHPTCs) under the government's PPP program (IFC 2014).

The last one is the US\$4.83 million Agribusiness Finance in the Philippines (approved in 2013), which, among others, funds a study on "value chain analysis of strategic crops in priority agriculture growing regions to identify needs of financial institutions and agribusinesses in order for IFC to design and implement optimal intervention for their partner banks and agribusiness lead firms" (IFC 2013a).

Many of the active World Bank projects being implemented today are part of its new Country Partnership Strategy (CPS) for the Philippines that the bank's board of executive directors endorsed in 2014. One of the key engagement areas identified by the World Bank in its CPS for the country is rapid, inclusive, and sustained economic growth. The bank describes it as "promoting economic policy reform for inclusive growth, boosting private sector development by improving the investment climate for firms of all sizes, including greater access to finance, and increasing productivity and job creation, especially in rural areas" (World Bank Group 2014). In addition, the CPS will "support structural reforms needed to reverse long standing policy distortions – food security, land reform, competition, labor market and business climate" (NEDA 2015). These projects continue the legacy of the World Bank in facilitating the corporate takeover of agriculture.

#### **Box 6.: A Closer Look at the MRDP**

The MRDP is a project that aims to implement the World Bank and the DA's refocusing on the value chain, enterprise development, and vertical integration from production to processing to marketing.

In 2015, the World Bank came out with its Implementation Completion and Results Report (ICR) on MRDP 2.

While the ICR reported a significant increase in household income of the direct beneficiaries, it must be noted that it was mainly driven by non-farm income (i.e., not related to farming, such as transporting goods and passengers via motorcycles). Income from non-farm activities grew by 67%, compared to only a 15% increase in on-farm activities (i.e., production of rice, corn, fish, livestock, etc.).

The World Bank has described the CFAD program as a means to address the diverse investment priorities of the communities, including funding subprojects like agribusiness activities and other alternative sources of income.

In fact, non-farm income accounted for a larger 58% of household income upon project completion, while on-farm comprised 39% and off-farm, 3% (i.e., labour wage, rent of farm equipment/animals, or any service fee from working on other farms). The substantial increase in non-farm incomes is attributed in part to the benefits from CFAD subprojects, but is also due to improved road conditions under the RI component of MRDP 2.

In addition, instead of focusing on livelihoods per se, CFAD focused more on developing enterprises and strengthening the value chain, which is consistent with the thrust of AFMA. The law mandates government to use the "market approach" in assisting the agriculture and fisheries sectors and promote "market-oriented" policies in agricultural production to encourage farmers to shift to more profitable crops.

This undermined the other priority of the MRDP – improved food security. Food security interventions under CFAD posted the lowest increase in volume of produce, marketed at 20%, while those that are in line with value chain strengthening and enterprise development registered substantial increases, such as subprojects involving small infrastructure (117%), agro-processing (46%), and community-managed sustainable agri-based livelihood (43%).

In fact, the next phase of the MRDP – which has now developed into the ongoing Philippine Rural Development Project (PRDP), bankrolled by US\$501.25 in World Bank loans – is building on the CFAD

experience. It moreover seeks to link national food security goals with localized agricultural suitability and comparative advantage. At the same time, it aims to facilitate the vertical integration of groups involved in agricultural, livestock, and fishery production, with those involved in processing and marketing to enhance value chain efficiencies and value adding.

MRDP 2 was also controversial because of the issue of the Aquino administration's Disbursement Acceleration Program (DAP). The DA admitted that it used Php919.30 million (US\$19.28 million) from the DAP as the government's counterpart fund for MRDP 2. The DAP was widely criticized as a form of presidential pork barrel (or lump sum, discretionary funds) used as a source of corruption and for political patronage. It was declared illegal by the Philippine Supreme Court.

### *ADB in the Philippines*

From 1998 to 2014 (available data), ADB projects in the Philippine ANR sector total US\$336.79 million. Of that amount, 98 percent are loans. Active projects are worth US\$104.61 million, while closed/terminated projects are worth US\$232.18 million. (See Table 5.) This is all sovereign funding, as the PSOD (private or non-sovereign) has no recorded investment in the country's ANR sector during the period.

**Table 5.: ADB projects in the Philippine agriculture and natural resources sector, 1998–2014**

| Project Name   | Project Type or Modality of Assistance | Status              | Approval Date | ADB Financing (US\$ in thousands) |
|--|--|---------------------|---------------|-----------------------------------|
| Enhancing Rural Enterprise and Rural Employment Project  | Technical assistance                   | Approved            | 18-Dec-14     | 1,000                             |
| Support for Post Typhoon Yolanda Disaster Needs Assessment and Response  | Technical assistance                   | Approved            | 23-Dec-13     | 725                               |
| Enhancing Capacities for the KALAH-I-CIDSS National Community-Driven Development Project   | Technical assistance                   | Approved            | 18-Dec-13     |                                   |
| Climate Resilience and Green Growth in Critical Watersheds   | Technical assistance                   | Approved            | 25-Oct-13     |                                   |
| Enhancing Social Protection through Community-Driven Development Approach (formerly Convergent Social Protection and Community-Driven Development) (formerly Support for Social Protection II) | Technical assistance                   | Approved            | 17-Jan-13     | 1,025                             |
| Integrated Natural Resources and Environmental Management Project  | Loan                                   | Approved            | 13-Dec-12     | 101,410                           |
| Agribusiness Development Assistance for Smallholders in Mindanao   | Grant                                  | Approved            | 11-Dec-12     |                                   |
| Climate Resilience and Green Growth in the Upper Marikina River Basin Protected Landscape – Demonstrating the Eco-town Framework   | Technical assistance                   | Approved            | 16-Jul-12     | 450                               |
| Decentralized Framework for Operations and Maintenance of Rural Infrastructure   | Technical assistance                   | Closed / terminated | 17-Dec-10     |                                   |
| Integrated Natural Resources and Environmental Management Project  | Technical assistance                   | Closed / terminated | 15-Oct-09     | 850                               |
| Agusan Integrated Water Resources Management Project   | Technical assistance                   | Closed / terminated | 24-Mar-09     | 930                               |
| Agrarian Reform Communities II   | Loan                                   | Approved            | 27-Oct-08     | 70,000                            |

|  |                      |                     |           |         |
|--|----------------------|---------------------|-----------|---------|
| Participatory Irrigation Management Sector   | Technical assistance | Closed / terminated | 30-Sep-08 | 1,000   |
| Integrated Coastal Resources Management  | Loan                 | Approved            | 23-Jan-07 | 23,550  |
| Agrarian Reform Communities II   | Technical assistance | Closed / terminated | 14-Sep-04 | 250     |
| Integrated Coastal Resources Management  | Technical assistance | Closed / terminated | 02-Aug-01 | 598     |
| Infrastructure for Rural Productivity Enhancement Sector Project   | Loan                 | Closed / terminated | 31-Oct-00 | 75,000  |
| Pasig River Environmental Rehabilitation   | Technical assistance | Approved            | 20-Jul-00 |         |
| Grains Policy and Institutional Reforms  | Technical assistance | Closed / terminated | 24-Apr-00 |         |
| Grains Policy and Institutional Reforms  | Loan                 | Approved            | 24-Apr-00 |         |
| Grains Policy and Institutional Reforms  | Loan                 | Approved            | 24-Apr-00 |         |
| Implementation of the Convention on Biological Diversity Through Improved Biodiversity and Development Planning in the Philippines | Technical assistance | Closed / terminated | 21-Jan-00 |         |
| Community-Based Forest Resources Management  | Technical assistance | Closed / terminated | 25-Oct-99 |         |
| Review of Cost Recovery Mechanism for Irrigation and O & M   | Technical assistance | Closed / terminated | 04-Aug-99 |         |
| Agrarian Reform Communities (DAR)  | Loan                 | Closed / terminated | 18-Dec-98 |         |
| Second Irrigation Sector   | Loan                 | Closed / terminated | 18-Dec-98 | 60,000  |
| Agusan Integrated Water Resources Management Project   | Grant                | Dropped             |           | 100,000 |
| Enhancing Rural Enterprise and Rural Employment Project  | Loan                 | Proposed            |           | 200,000 |
| <i>Source: ADB</i>   |                      |                     |           |         |

Dating back to its inception in 1966, ADB's cumulative loans, grants, and technical assistance to Philippine ANR and rural development has reached more than US\$2 billion for 170 projects. The amount represents more than 13 percent of the total and ranks third behind public sector management (almost 23%) and energy (almost 22%) (ADB 2015b).

One of the largest loans provided by the ADB in Philippine ANR is for the Agrarian Reform Communities (ARCs). The second phase of the project, worth US\$70 million, was approved in 2008 and is ongoing. ARCs are identified barangays (villages) or clusters of barangays with the highest concentration of agrarian reform beneficiaries (ARBs) under the CARP. Through ARCs, government can supposedly channel and pool funds for support services and other resources.

In reality, ARCs became a mechanism for the Philippine government to implement neoliberal globalization's theory of comparative advantage and required that certain areas of the country plant only specific crops. The scheme greatly reduced the farm areas used to produce food such as rice and corn, as production shifted to so-called export winners and other commercial crops. Through ARCs, government encouraged and facilitated tie-up between ARBs and other farmers with agribusiness companies, most of which are involved in export production (Halim 2006).

Marketing tie-ups include contract growing, joint venture, and lease arrangements. Such production arrangements allowed local landlords and agribusiness companies to exert effective control over

lands already distributed by, or in the process of distribution under, the agrarian reform program. Thus, ARCs and their promotion of farmer-agribusiness tie-ups intensified the poverty of small farmers and further disempowered them. At the core of such marketing tie-ups is the uneven relationship between corporations and farmers, with the former using their “bargaining clout to their short-term financial advantage” (FAO 2015a).

Contract growing and similar arrangements disadvantage farmers in four ways: 1) corporations are able to pass on the burden of production risks, such as typhoons and drought, to farmers; 2) corporations are able to exploit peasant labour, yet are not obliged to abide by labour laws; 3) corporations are able to dictate (i.e., artificially shrink) the price of produce; and 4) through effective control on production and marketing, corporations become the effective owner of the land, while the visibly one-sided deals threaten to bankrupt farmers, who therefore risk losing the land (Halim 2006).

Moreover, contract farming is also “generally associated with the production of commercial crops for export, mono-cropping and forms of production that rely heavily on chemical fertilizers and pesticides, often with adverse repercussions for human health and for soil” (De Schutter 2011b).

## 5. Conclusions and recommendations

It seemed that as the World Bank facilitates overflowing global financial flows to Third World agriculture, it would enhance the production and development of capital-starved rural communities such as the ones in Bukidnon, Mindanao, Philippines. However, the role of the World Bank has historically been to facilitate capital to gain advantage in setting agricultural policies in favour of neoliberal globalization. In the phenomenon of financialization, this role has further expanded to influencing financing mechanisms that would allow the private sector to be directly involved in agricultural production.

Its controversial record of financing projects that figure in alleged land grabbing has added a new feature in the Philippine setting. Although none of the case areas in this study shows outright land grabbing, they all bear explicit elements that lead to farmers' dispossession through lending. World Bank financing continues to be in the form of loans, coursed through local government agencies – in this case, the irrigation agency – and subsequently imposes a fee for a crucial service support as irrigation. Any farmer mired in irrigation debt stands to lose his or her land to the government.

The MRDP is strictly speaking a PPP, and the Philippine government through the DA is shelling out its counterpart funding. The local economic oligarchs, both in infrastructure and agribusiness, are involved in construction and trading, while foreign suppliers of technology and buyers of agricultural products stand to gain from the partnership. In place and institutionalized, which ensures the profitability of the project, is an irrigation fee. Among Southeast Asian countries, only in the Philippines is there such a thing as an irrigation fee charged to the farmer. The World Bank is historically known to have introduced this mechanism of recouping its investment in Philippine agriculture. This has further marginalized Filipino farmers.

With Sikat Saka, the World Bank is once again introducing a credit facility similar to Masagana 99 of the Green Revolution, which is adding to the farmers' indebtedness instead of uplifting their plight. The threats of climate change and other weather disturbances, such as the El Niño drought phenomenon and super-typhoons, are also incorporated in the risk insurance of the loan.

Meanwhile, Filipino farmers faced the impact of steep food-price hikes during the 2008 crisis, despite the World Bank's MRDP and even after the peak of the food crisis. They continue to face the burden of high prices for food, household commodities, social services, and production inputs because of entrenched monopoly trading and pricing. The MRDP has not dismantled this monopoly and even served as a vehicle for promoting further input-dependent varieties, which have continued to impoverish farmers.

The case study shows that the World Bank-promoted financialization of Philippine agriculture achieves its end – i.e., skimming profits from finance capital and at the same time gaining from trade – by perpetuating and using the local context. Landlessness in the Philippines is rampant, with the latest estimates placing it at nine out of 10 farmers being landless. Land grabbing has long existed along feudal structures. The country has a post-colonial history where its elite has maintained control over large landholdings and is focused on supplying tropical and indigenous crops to global markets. Philippine agriculture has been restructured to serve global business – whether the import-export of agribusiness transnational corporations or as the market of agrichemical corporations. The most crucial aspect of this restructuring has been the state circumvention of land reform in order to maintain landlord ownership and control.

The MRDP is not focused on these basic problems of agriculture as the first step in enhancing farmers' production and livelihood. Instead, it uses this condition to gather a handful of farmers and

capacitate them with capital; they simply add to the layer of rent-seeking activities in the rural economy. The so-called empowered farmers can become small-time rentees, but most of the time they lose their land, grow in debt, or become poorer labourers. In many of the cases, the farmer-beneficiaries take more risks in borrowing, emboldened by the new finance capital, but without real production support from the World Bank and the government.

Financialization of agriculture is just the latest chapter in the long, ongoing narrative of profit-seeking corporations taking over land and resources and dislocating rural communities economically, and often also physically, in the process. As global capitalism finds ways to reverse slowing rates of corporate profits, it has turned to agriculture to skim profits through entrenched monopolies and speculation.

Consequently, global food insecurity and poverty have worsened as food prices rise and small food producers get further excluded and displaced. Worse, with government endorsement, multilateral institutions that vow to reduce poverty, such as the World Bank, are playing a key role in driving financialization. Its dual role as a development partner that shapes and funds national agricultural policies and programs and as a private investor puts the World Bank in an exceptional position to advance the interests of corporate capital in agriculture.

The World Bank helps create favourable environments for corporations as a funder and policy advisor, then infuses more capital into these corporations directly or indirectly via financial intermediaries. Through private equity funds, for instance, it bankrolls big plantations and other agribusiness ventures, while at the same time funding programs like agribusiness development and PPPs that facilitate greater corporate control of agriculture.

This study adds to the long list of literature that questions the role of the World Bank in agriculture, the interests it serves, and its overall function as a development partner. The situation of poor Filipino farmers in Mindanao under a World Bank project is an additional testimony to the countless others against the sort of agricultural development it promotes.

While bigger financing is needed by Philippine agriculture, corporate capital – including finance capital – which the World Bank enables, is not the type of investment that will serve the long-term development agenda and needs of rural communities there. Corporate capital as the primary driver of agricultural growth and development just deepens the underlying factors behind Philippine rural poverty and backwardness. The World Bank's undue emphasis on agricultural infrastructure – such as irrigation, export-oriented, capital-intensive agribusiness – and global value chain fuels more displacement from land and other productive resources of many Filipino farmers.

Indeed, in today's era of financialization and greater corporate power, the call for a system of food and agricultural production that is life enhancing – i.e., one that can truly sustain the direct producers and the environment – is more urgent than ever.

Life-enhancing agriculture gives bias not to corporate capital but to the real and in fact largest investors in agriculture – the communities that till and enrich the land. This entails resolving first and foremost the massive landlessness in the countryside, especially in the underdeveloped world, that deprives an overwhelming majority of rural families of a sustainable and productive livelihood. Additionally, a life-enhancing agriculture ensures small farmers' access to modern technology, infrastructure, equipment, agricultural services including irrigation, and so on, instead of corporate monopoly control over such means of production.

In the case of the Philippines, where poverty remains largely a rural phenomenon, a life-enhancing agriculture provides a viable approach to reduce poverty and to drive long-term rural and overall economic development. A straightforward link can be made when small farmers are viewed as consumers themselves who, with vastly improved spending capacity and comprising a vast majority of the population, can spur domestic economic production.

Campaign-wise, financialization of agriculture provides opportunities and challenges to life-enhancing agriculture. On the one hand, the intensified exclusion and displacement of already marginalized rural communities creates conditions for a national campaign on, for instance, effective land redistribution and genuine agrarian reform to advance with more urgency and resolve.

On the other hand, through the use of financial intermediaries, the identity and therefore, the accountability of the real culprits behind land grabbing, and in some cases even human rights abuses against rural communities, are further concealed. This is true even for the World Bank and other multilateral institutions whose use of private equity funds, hedge funds, and other financial instruments effectively shrouds their role in controversial land investments and deals.

Targeting specific investments coursed and hidden through financial intermediaries is effective in terms of having a concrete case where the World Bank and other investors can be held accountable and in terms of exposing them. But, particularly in the context of the World Bank, this should be part of a campaign where they are already exposed and directly involved: namely, the programs and projects they promote that negatively impact agriculture and rural communities. This allows the campaign to engage at the level of policies and frameworks and not be limited, as in the case of some current campaigns, to simply make agricultural investments more responsible through some internal or voluntary mechanisms. It also allows that proposals for life-enhancing agriculture are invariably predicated on community rights and aspirations.

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# Glossary

*Compiled from Miller, Richter, McNellis, & Mhlanga 2010; Buxton, Campanale & Cotula 2012; Murphy, Burch & Clapp 2012; Goldberg, Segel, Herrero & Terris 2012; Schanzenbaecher & Allen 2015; and GIIN 2015.*

**Asset class:** An investment category in which investor managers can allocate investment capital, e.g., equities, fixed income, real estate, emerging markets, commodities, and, more recently, microfinance.

**Asset owner:** Individuals or companies that own the capital and have full discretion over the way the capital is invested across different asset classes.

**Asset manager:** Entity that manages investments on behalf of the asset owner. It can focus on just one asset class (e.g., listed equity, real estate) or across a range of asset classes (e.g., investment fund managers/private banks; private equity (PE) funds; hedge funds)

**Closed-end fund:** A collective investment scheme with a limited number of shares. New shares are rarely issued after the fund is launched; shares are not normally redeemable for cash or securities until the fund liquidates. Conversely, open-end funds do not have restrictions on the amount of shares the fund will issue, and will buy back shares when investors wish to sell.

**Commodity index funds (CIF):** Financial investment products that track prices of a bundle of commodities. Typically, 15% to 30% of CIFs are made up of agricultural commodities (the rest is comprised of minerals, oil, etc.). Most CIFs are sold over the counter.

**Development finance institution (DFI):** A government-backed financial institution that provides financing to the private sector for investments promoting development.

**Derivative:** A financial instrument that derives its value from the price of an underlying asset, e.g., commodities. The most common derivative instruments are forward contracts, futures contracts, options, and swaps.

**Exchange trade funds/products (ETF/ETP):** Products traded on a stock exchange, such as stocks. These can include assets such as commodities that track an index and can be backed by physical assets or (more commonly) by derivatives. ETFs are usually marketed by investment banks and purchased by institutional investors.

**Financialization:** In the case of financial investments in food commodities, financialization refers to investors' speculative involvement in food commodity delinked from taking possession of any physical commodity. In the case of food production, financialization refers to how various investment funds are "buying or leasing land and producing agricultural commodities" (Murphy et al. 2012:6)

**Frontier markets:** Markets for investment that have lower market capitalization and liquidity than the more developed emerging markets. Frontier markets are typically pursued by investors seeking high, long-term returns and low correlations with other markets.

**Forward contract:** An agreement between two parties to deliver a commodity on a future date at a price that is set today. Forward contracts are usually used by farmers and grain elevator operators.

**Futures contract:** Standardized contract to buy or sell an asset on or before a future date at a specified price that is set today. In the US, standardized futures are cleared through an exchange or clearing house.

**Hedge fund:** A fund usually comprised of investment funds of wealthy individuals and institutions, which uses aggressive strategies that are unavailable to smaller retail investors. Hedge funds have been typically exempt from most forms of registration and regulation.

**Hybrid funds:** Funds that invest in a wide variety of asset classes and that do not specialize in any one category or geographic area. The funds are also known as multi-strategy funds.

**Impact capital vehicle:** A legal entity that holds capital intended for direct impact investments. These include impact funds, foundations, and formal entities used by high net worth individuals to hold capital. DFIs are not included in this category for this report.

**Investors:** For the purpose of this report, investors are classified as follows:

- **Institutional investors:** insurance companies, pension funds, mutual funds, sovereign wealth funds, hedge funds, and university and foundation endowments. Commercial banks can also be included in this category (Clapp 2013);
- **Development finance institutions (DFIs):** “government-funded investment corporations that combine the broad development objectives of traditional multilateral aid agencies with the commercial approach taken by private-sector banks and investors” (GIIN 2015);
- **Private investors:** wealthy individuals, corporate entities, investment houses, and foundations;
- **Impact investors:** entities that invest with the intention of generating a beneficial social or environmental impact alongside a financial return, and who seek to measure the social or environmental returns generated by their investments (GIIN 2015:5).

**Investment fund:** A form of collective investment where a group of investors pools funds together with the aim of generating more profits. It is synonymous with a mutual fund.

**Investment management:** The professional management of various securities (shares, bonds and other securities) and assets (e.g., real estate) to meet specified investment goals for the benefit of the investors.

**Land aggregator:** Listed companies whose core strategy is to invest in land.

**Mutual fund:** An investment programme funded by shareholders that trades in diversified holdings and is professionally managed.

**Option:** Contract giving the right, but not the obligation, to buy or sell an asset.

**Over the counter (OTC):** Products traded and negotiated privately between two parties without being cleared through an exchange.

**Private equity fund:** A fund that invests in private equity, where it generally attempts to gain control over companies to restructure them and ultimately sell them for a profit. These funds include both institutional investors without return expectations and private investors (wealthy individuals) with strong commercial orientation.

**Security:** Shares, bonds, and other securities.

**Sovereign wealth fund:** A state-owned fund that invests, usually over the longer term, in stocks, bonds, real estate, precious metals, or other financial instruments. More recently, some of these have also invested in land.

**Swaps:** Contract to exchange cash on or before a specified date based on the underlying value of the commodity. Swaps are used for tailored futures products that are not standardized. Swaps are usually arranged over the counter.

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