

AGRO-INVESTMENT IN AFRICA - IMPACT ON LAND AND LIVELIHOODS IN MOZAMBIQUE AND TANZANIA

BY RANDI KAARHUS, RUTH HAUG, JOSEPH P. HELLA AND JEREMIA R. MAKINDARA

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**Department of International Environment and Development
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Department of International Environment and Development Studies, Noragric
Norwegian University of Life Sciences (UMB)
P.O. Box 5003
N-1432 Aas
Norway
Tel.: +47 64 96 52 00
Fax: +47 64 96 52 01
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Randi Kaarhus and Ruth Haug

LIST OF ABBREVIATIONS

ACIS	<i>Associação de Comercio e Indústria</i>
ACT	Agricultural Council of Tanzania
AEM	<i>Associação de Empresarios de Manica</i>
AGRA	Alliance for a Green Revolution in Africa
AIFI	Agricultural Input Financing Initiative
APAC	<i>Associação de Promoção de Agricultura Comercial</i>
ASDP	Agricultural Sector Development Programme
BAGC	Beira Agricultural Growth Corridor
CAADP	Comprehensive Africa Agriculture Development Program
CDM	Clean Development Mechanism
CEPAGRI	Centre for the Promotion of Agriculture
CSO	Civil Society Organisations
DNTF	National directorate for land and forests
DUAT	Land Use and Benefit Right (in Mozambique)
FAO	UN's Food and Agriculture Organization
FDI	Foreign Direct Investment
FIAN	FoodFirst Information and Action Network
FRELIMO	<i>Frente de Libertação de Moçambique</i> (current governing party)
GDP	Gross Domestic Product
iTC	<i>Iniciativa de Terras Comunitárias</i>
MKUKUTA	The National Strategy for Growth and Poverty Alleviation
MINAG	Ministry of Agriculture
MLT	Mozambique Leaf Tobacco
NBTF	National Biofuel Task Force
NEPAD	New Economic Partnership for Africa's Development
NGO	Non-governmental organisation
NMB	National Microfinance Bank
ORAM	<i>Organização Rural para Ajuda Mutua</i>
PPP	Public Private Partnership
REDD	Reduced Emission from Deforestation and Forest Degradation
SAGCOT	Southern Agriculture Growth Corridor of Tanzania
SPGC	<i>Serviços Provincias de Geografia e Cadastro</i>
TAP	Tanzania Agricultural Partnership
TAZARA	Tanzania - Zambia Railway Authority
TIC	Tanzania Investment Center
TNBC	Tanzania National Business Council
UCAMA	Union of Peasants in Manica
UNCTAD	United Nations Conference on Trade and Development
WEF	World Economic Forum

1. INTRODUCTION

This report is the result of several dialogue processes which have partly changed the focus of the study. Noragric's original concept note¹ for a study on "Global agro-investments in Africa" basically worked with two assumptions: 1) That relatively high food prices since the food price crisis of 2007/08 have contributed towards increased demand for land in developing countries, in particular in Africa; 2) That the current climate change agenda adds to this increasing pressure on land – as a result that bio-fuels are being promoted as a more climate-friendly alternative to the currently unsustainable use of fossil fuels. However, the whole study with the two country-specific cases has been developed successively through new inputs and dialogues with both NORAD-Oslo and the Norwegian embassies in Maputo and Dar es Salaam.

1.1. NEW INVESTMENTS IN AGRICULTURE AND AN EMERGING PROBLEM OF 'LAND GRABBING'

In 2008-2009, what appeared as a new boost of neo-colonial resource exploitation in Africa by investors from more-developed countries, led to heated debates on *land grabbing* in the media, and created concern among civil society and international organisations, as well as development agencies and researchers. In 2008, a 99-year land lease agreement on 13,000 km² of land for cultivation between the Government of Madagascar and a South Korean company (Daewoo) attracted particular attention. It was, however, cancelled in early 2009 after widespread popular protest and military involvement had led to the elected President's fall (Cotula *et al.* 2009:37).² By then, large-scale land acquisitions in connection with Foreign Direct Investment (FDI) had become a highly contested issue.

After decades of limited interest in investing in agriculture, FDI in agriculture is on the rise in developing countries (UNCTAD, 2009). The challenge is how to invest in agriculture, both from a national and international perspective, in ways that not only boost production, but also secure food and livelihoods, create jobs and reduce poverty, recognize the rights of local men and women and at the same time take care of environmental issues. Mozambique and Tanzania were selected as country cases to address how different kinds of agro-investment might impact on land and livelihoods in African countries. In addition to land acquisition/land grabbing by both national and foreign investors, which is taking place in both countries, there are many other ways in which national and international actors may invest in agriculture. In both Mozambique and Tanzania, Norway supports agro-investment through public-private partnerships (PPP) through agricultural growth and development corridor approaches: the *Beira Agricultural Growth Corridor Partnership (BAGC)* and the *Southern Agricultural Growth Corridor of Tanzania*

¹ Within the general Frame Agreement between NORAD and the Norwegian University of Life Sciences (UMB), making UMB's competence available for NORAD on demand, a study on "Global agro-investments in Africa" was proposed by Noragric/UMB and approved through a request from NORAD to Noragric dated 08.09.2009.

² Cf. <http://www.grain.org/seedling>

(SAGCOT). The Norwegian fertilizer company Yara International has been instrumental in the starting phase of these initiatives, while Norway has contributed funds. Development of agricultural production and commercial agribusiness, scaling up specific commodity production, and developing commodity value chain approaches are among the aims of the BAGC and SAGCOT partnership initiatives. In both cases the ‘agricultural growth corridor’ approach also involves infrastructure development. Yara originally planned to contribute to the development of Beira Port, but is at present giving priority to building new port facilities in Dar es Salaam.

1.2. OBJECTIVES AND APPROACH

The purpose of the study is to assess different approaches to agro-investment in Mozambique and Tanzania and to learn lessons on how agro-investment might impact on land and livelihoods in the two countries. The study focuses on two different agro-investment approaches:

- (a) Land acquisition/“land grabbing” by national and foreign investors*
- (b) Corridor approach: Beira Agricultural Growth Corridor Partnership (BAGC) in Mozambique and Southern Agricultural Growth Corridor of Tanzania (SAGCOT)*

The two different approaches might be overlapping in the sense that land acquisition may also take place in relation to the growth and development corridor investments.

The study addresses the following specific objectives and questions:

- A. To assess land acquisition (land grabbing) in Tanzania during the last years*
 - What is the government’s policy and different groups of people’s perceptions on foreign investment in land and agriculture? What is the status and prospects regarding land acquisition and impact on local people regarding land rights, compensations, employment opportunities, joint venture, contract farming and possible contribution towards development?

- B. To assess the potential for Beira Agricultural Growth Corridor Partnership (BAGC) in Mozambique and Southern Agricultural Growth Corridor of Tanzania (SAGCOT) to contribute towards agricultural development, food security and poverty reduction.*
 - In the specific context of public-private partnership for promoting agro-investment such as BACG and SAGCOT, what are the implication for land use and local people’s livelihoods?
 - Who are the main actors and what are their interests in land in the targeted areas? How are the main actors’ interests related and articulated? And how can smallholders be represented in the BACG and SAGCOT agricultural development partnership?

- C. To assess the possibilities for and conditions under which an ‘agricultural corridor approach’ can also involve large-scale land acquisitions (land grabbing) by external investors in the Beira Corridor in Mozambique.*

Study Approach. The study is based upon literature review and field work which was undertaken in the two countries during the first half of 2010. Qualitative data were collected by interviewing

key informants in the two countries such as smallholder and large-scale farmers, village leaders, extension agents, agricultural officers, market managers, employees in several ministries and public institutions, national and international NGO representatives, university professors and researchers, Norwegian embassy and Norad employees, and private sector representatives. In Tanzania, 14 farmers in Kisarawe District were purposely selected and interviewed in July 2010 about their experience with land acquisition. Also, the views of the British Sun Biofuels Company and on agro-investment in general were sought. The primary data were analyzed by noting perceptions and exploring patterns in the responses. The report aims at studying agro-investment as a phenomenon and not generalizing its findings to the country or regional level which the methodological approach does not allow.

2. CASE STUDY: MOZAMBIQUE

2.1. BACKGROUND AND SCOPE OF THE MOZAMBIKAN CASE STUDY

The design and focus of the Mozambican case study in this report has been developed through consultations with representatives from both Norad³ and the Royal Norwegian Embassy in Maputo.⁴ From the Embassy's perspective a study focusing on new agro-investments in Mozambique has been of particular interest in connection with the *Beira Agricultural Growth Corridor (BAGC)* Partnership. This is a *public-private partnership* initiative followed by the Embassy with great interest, and some seed money, since its initiation in 2008-2009. Among the objectives delineated within the framework of the BAGC initiative is increasing agricultural production through investments in commercial agribusiness, the scaling up of production of specific marketable commodities, and a further development of commodity value chains. The long-term scope of the initiative has been both national and regional, with its axis in the historic 'Beira corridor' in central Mozambique. This is the rail and road transport facilities that start in Beira port leading to Zimbabwe/Harare through the Mozambican provinces of Sofala and Manica, with a branch to the province of Tete. As an agricultural development and growth initiative, the BAGC is further foreseen to be linked to coordinated efforts in transport infrastructure rehabilitation and development.

One of the reasons why the Norwegian Embassy has followed the BAGC initiative with particular interest is the fact that Yara International ASA had been instrumental in the starting phase of the initiative, both as a convener and lead partner. Yara's involvement has further been supported by the Norwegian Government, formally through a Memorandum of Understanding (MoU) between the Norwegian Ministry of Foreign Affairs and Yara aiming to strengthen public-private partnership initiatives and promote an 'African Green Revolution'. As a main company in the global fertilizer industry, with historical roots in one of the major industrialization initiatives in Norway in the early 20th century (the establishment of *Norsk Hydro* in 1905) and with current headquarters in Oslo, Yara has over the last years been seeking to consolidate its role on the international scene through e.g. more permanent presence and plans for future expansion in Africa (Yara 2009).

From Norad's perspective, Noragric's original study proposal – focusing on factors that can potentially lead to increasing pressure on land in sub-Saharan Africa – brought up a set of related issues for discussion:

- In the specific context of a public-private partnership for promoting international agro-investments such as BAGC, what are the implications for *land use*, local people's *livelihoods*, and changing relationships between different categories of *land users*?

³ Represented by NUMI; NORAD's section for Private Sector Development and Environment

⁴ The case study has further benefitted substantially from field work carried out in Manica Province in the period 2007-2009 for a larger research project supported by NFR – the Norwegian Research Council – under the *Poverty and Peace* programme.

Within the broader policy context of the new agenda for an *African Green Revolution*, national political leaders have stated that major objectives are *both* to produce enough food *and* to achieve economic growth through investments and the development of agriculture.⁵ The objectives and strategies formulated for implementation by NEPAD/CAADP, as well as by AGRA, form part of the regional policy context for a public-private partnership such as BAGC. These are also initiatives and programmes more directly supported by Norwegian development cooperation. From Norad's point of view, these interlinked initiatives and recent development trends, in connection with BAGC raise more specific questions about:

- Who has interests in land in the targeted area, and what kind of interests are these? Who are the main actors? How are the main actors' interests related and articulated? And how can smallholders be represented in the BAGC agricultural development partnership?

Norad has expressed an interest in getting more concrete and contextualized knowledge on these issues. On the one hand, Norad needs a solid and continuously updated knowledge base for strategies and policy recommendations in focus areas such as food security, agriculture and economic growth, local impacts, and long-term sustainability. But this case study has also been considered of importance to give a basis for more specific recommendations on further Norwegian support to the BAGC initiative. At the same time, the Norwegian Embassy in Maputo has expressed its continued interest in being well-informed about the multiple-level processes involved – with a particular interest in getting more information on local processes, contexts, actors and initiatives within the developing BAGC partnership.

2.2. REGIONAL AND HISTORICAL CONTEXTS

The geographical area referred to as the 'Beira Corridor' varies considerably depending on sources, as well as outlook. In the main BAGC Report (2010),⁶ the Beira Corridor is described as "the gateway to South Eastern Africa", and as a "road and rail network linking Zambia, Malawi, Zimbabwe and Mozambique to the port of Beira on the Indian Ocean". It is further defined as an area covering three Mozambican provinces, Sofala, Manica and Tete. The area of the three

⁵ In an African context, *AGRA – Alliance for a Green Revolution in Africa* – is a partnership-based agency seeking to promote a fundamental transformation of African agriculture, i.e. an 'African Green Revolution'. In a regional political context, main partners for the Alliance are NEPAD – the African Union's New Economic Partnership for Africa's Development, through its CAADP programme – the Comprehensive Africa Agriculture Development Program. The CAADP works with 4 'pillars', aiming to: 1) Extend sustainable land management and water control systems; 2) Increase market access through e.g. improved rural infrastructure; 3) Increase food supply and reduce hunger through e.g. raising smallholder productivity; 4) Improve agricultural research and extension systems. <http://www.nepad-caadp.net> [accessed July 8, 2010]. According to AGRA's Strategy, the Alliance is working to "achieve a uniquely African Green Revolution" which will "put smallholder farmers first while protecting biodiversity, promoting sustainability and advancing equity". <http://www.agra-alliance.org/section/about/agrastrategy> [accessed July 6, 2010].

⁶ The key document on the Beira Agricultural Growth Corridor that is publicly available (with a series of annexes) is a comprehensive report presented (including an Investment Blueprint) at the World Economic Forum at Davos, Switzerland, in January 2010. It is accessible at <http://www.beiracorridor.com/documents/IBlow.pdf> [accessed July 8, 2010] and will here be referred as *BAGC Report (2010)*.

provinces is approximately 230.000 km². In the BAGC Report it is characterised by its huge agricultural potential, that is: “10 million hectares of arable land”⁷ (2010, pp. 4, 6, and 9).

A map developed for the BAGC initiative is shown here as it gives an excellent illustration of the geographical setting of the future corridor development plans, and shows the infrastructure framework which is the backbone of the corridor. In a national Mozambican context, the Beira Corridor commonly refers to the axis of transport infrastructure crossing central Mozambique – port, railway and road – from the city of Beira port through Sofala Province to Chimoio (provincial capital of Manica), continuing through Vila de Manica to Machipanda – the major border crossing to Zimbabwe. From this crossing point, the railway continues through the city of Mutare to Harare in Zimbabwe, while the main road also connects to Lusaka in Zambia.



2.2.1 Public and private roles and responsibilities: Antecedents in colonial history

Historically, the core area of the current BAGC initiative in Mozambique – that is, most of the territory between the Zambezi River in the north and Sabi River in the south – was contracted out to a private company, the Mozambique Company (*Companhia de Moçambique*). In the 1880s and ‘90s, Portugal was under extreme pressure, both from the British Empire and Cecil Rhodes’ expansionist ventures across the border, to assert its “effective occupation” of present-day Mozambique (Newitt 1995:369). In 1891, the same year as a final treaty on borders was signed between Portugal and the British, the Mozambique Company was granted the right to taxation, to issue currency and postage stamps, and to give out land and mineral concessions in central Mozambique.⁸ The Company’s duties included administration of the territory, while paying 7, 5% of its profits to the Portuguese government.

⁷ These figures on available land are, however, different from those presented in other available reports, e.g. Calengo 2009. More under “Land issues” below.

⁸ The mineral potential of the coal fields in e.g. Moatize in Tete Province, which is currently one of the mega projects being developed in the region, was already known in the late 19th century (Newitt 1995).

In the Manica highlands, sub-concessions to establish farms were soon leased to white settlers. At the same time, the Company prioritized developing the port of Beira, as well as the railway to (then) Southern Rhodesia. While Beira city expanded rapidly, the railway line was completed by 1898. Built by a subsidiary of the British South Africa Company, its primary purpose was, like that of Beira port, to serve Southern Rhodesia (Newitt 1995:395-96). From 1910 onwards, it was also British interests backed by South African capital which dominated the Mozambique Company. The Company ruled its concession territory in central Mozambique until 1941. According to Newitt⁹, both the economy of the Mozambique Company and that of the colonial state as a whole depended not only on the taxation of African smallholders and the use of their labour (including forced labour) within the colony, but also on the provision of services and (Mozambican) labour to the neighbouring British colonies.

2.2.2 A ‘modern’ plantation economy and a coercive state

An incipient plantation economy in Mozambique was initially dependent on forced or ‘unfree’ labour, and the Mozambique Company experimented with forcing peasants to grow cotton within its territory (Newitt 1995:393, 454). The more successful plantation economy was, however, primarily represented by the Sena Sugar Company. Sena Sugar had been granted large land concessions on the north bank of the Zambezi River (now provinces of Zambezia and Tete). Portugal was in this way adapting the former system of colonial *prazos* to a more modern plantation economy.¹⁰ The Mozambique Company also gave concessions to Sena Sugar within its own territory. According to Newitt (1995:427), these plantations represented an export-oriented economic activity that attracted outside investment. They “generated considerable foreign earnings and led to the building of a substantial infrastructure”. At the same time, the plantations were “isolated islands of production linked to the outside world through the nearest port and exporting their product and much of their profits” (Newitt op.cit.).

For the current BAGC initiative it is, of course, a key challenge to avoid building a structure of such ‘isolated islands’ – precisely through the development of a much more integrated approach and the creation of sustainable local synergies.

Large-scale production of cotton for the market was eventually established in Mozambique under the neo-mercantilist (fascist) regime of Salazar’s *Estado Novo* in Portugal (1933-1974). State planning and cotton-growing ‘campaigns’, in combination with compulsive measures had, according to Newitt, by 1944 resulted in a total of 791, 000 smallholders involved in cotton growing on 267, 000 ha of land (1995:455). Cotton was, however, mainly produced in the northern part of Mozambique (e.g. present-day Nampula Province). Other crop growing

⁹ Newitt’s *A History of Mozambique* (1995) is so far the most comprehensive and authoritative authoritative historical work in the field.

¹⁰ In central Mozambique, the Kingdom of Portugal had as a colonial power historically used so-called *prazos* as a system of territorial control and large-scale land concessions. The *prazos* involved large tracts of land granted to individuals/families for “three life tenures” (Newitt 1995:224). With a primary objective being political control, they formed the basis for the creation of an Afro-Portuguese elite in central Mozambique, and were in practice subject to *matrilineal* inheritance, parallel to local traditional systems of transmission of rights and authority north of the Zambezi. In the late 19th and early 20th century, however, the *prazos* were rather leased out to plantation companies as estates for sugar and copra production – such as Madal in Zambezia, in which Norwegian capital interests were also involved.

programmes included irrigation schemes for rice production. These were also started up under a state-led system of concessions, quotas and forced cultivation (Newitt 1995:456). A major rice scheme was established on the Limpopo River in southern Mozambique.

When the *Estado Novo* in the 1930s further decided to consolidate colonization by supporting the migration of Portuguese peasants to Mozambique, irrigated land was, in part, reserved for Portuguese settlers. As the Portuguese migrants were often poor (and illiterate), from 1945 onwards the new settlers got free passage to the colony, and in the 1950s they were also entitled to extensive loans and grants to get established in the so-called *colonatos* dedicated to ‘modern’ family farming (Newitt 1995:466). This was the basis for development of the *colonatos*’ settlements in present-day Sussundenga District in the province of Manica, which is targeted as a core area for a planned first phase (2010-1015) of the current BAGC initiative.

With Mozambican independence in 1975, both the state administration and the economic development plans set up under FRELIMO leadership were again highly centralised. Within the initial development agenda of FRELIMO,¹¹ the development of a modern-state agricultural sector consisting of state farms was prioritized. In part, the state farms were established on the land of abandoned Portuguese estates and in part on the land of former *colonatos*’ settlements. By 1982, the state farms had 140, 000 ha under cultivation (Newitt 1995:553). They used modern technology, drawing upon foreign expertise and economies of scale, and sought to develop agriculture through creating and developing a class of agricultural labourers. This period of state farming in Mozambique took place in a larger context of decolonization in the 1960-70s, when the new governments “increasingly assumed control over their natural resources, including land, making it more difficult for foreign investors to become involved in the production of agricultural goods directly” (UNCTAD 2009:105).

In Mozambique, however, the period of state farming was relatively short. The model met with a lot of resistance, and its implementation basically coincided with the civil war that followed Mozambican independence. Even before the signing of the Peace Accord in 1992, the FRELIMO government had actually initiated the implementation of an extensive structural adjustment and liberalisation programme. This was one element in a conditionality “package”, in part developed by the World Bank and the FMI (Abrahamsson & Nilsson 1995:111, Sjaastad et al. 2007:34). In 1989 the (re)privatisation and restructuring of state-owned companies started, 20% of these were state farms (Pitcher 2002).

2.2.3 Liberalisation: Opportunities and challenges in agricultural development

After privatisation and restructuring of the Mozambican economy, the major foreign private investors in agriculture and agro-processing in Mozambique were still British (with Lonrho as a major company), in addition to South African and Portuguese capital (Pitcher 2002:208). More recently Mauritian and Brazilian capital has come in, investing e.g. in a renovated Sena Sugar Company, which operates in Sofala and Zambezia provinces, producing refined sugar for the internal market.

¹¹ The FRELIMO party declared itself as a Marxist-Leninist party in 1977.

Within the region targeted for the BAGC initiative, the Mozambican provinces of Sofala, Manica and Tete, a total of 25, 700 ha is today under commercial farming according to the BAGC Report (2010:13). Of this area, 22, 000 ha belong to two large sugar plantations. Tobacco is at present cultivated mainly by smallholders on approximately 80, 000 ha (mainly in Tete), for sale to large processing companies such as MLT.¹² MLT has considerable experience with outgrower schemes (World Bank 2006a:16). In Manica Province, the Vanduzi Company, established in 2004, is so far the major agribusiness company. Its land covers about half of the remaining 3,700 ha of commercially farmed land in the BAGC area. Vanduzi has specialized in horticulture, currently baby corn and chillies, with 99% of its production aimed for export. Currently owned by British capital through Mozfoods (former Moçfer) S.A, building on Zimbabwean experiences and South African management, it has also established direct links to the British supermarket chain Sainsbury. In addition to its own farm production, Vanduzi has involved smallholders organised in associations as outgrowers (World Bank 2006a). Vanduzi has further been supported in the company's smallholder linkage activities by several externally financed agencies.¹³

It is here argued that in the concrete planning and implementation of a new agro-investment initiative such as BAGC, it should be taken into account how recent history has actually shaped the political-economic environment, as well as more directly affected landholding structures, agricultural production and producers in central Mozambique. That means taking into account the current *impacts* of the concession period of the Mozambique Company, the later establishment of the *colonatos* under the Portuguese *Estado Novo*, their transformation into state farms, and finally the privatization under the *structural adjustment* period in the late 1980s and 1990s. The recent privatization of the former state farms in the province of Manica has furthermore represented opportunities for people outside the province to access high-potential agricultural land. Especially well-connected people linked to the post-colonial elite seem to have been able to benefit from these opportunities.

A significant part of the projects targeted for the pilot phase of the BAGC initiative (the 2010-2015 phase) is located to lands that fall under the category of former state-farm land. This implies, on the one hand, that the new agro-business initiatives will not depend on large-scale land acquisitions or alienation of local communities' and smallholders' (current) land rights. In the analysis of investment opportunities and implementation bottlenecks presented with the BAGC initiative, the question of how to "streamline" land leases for investors is, however, brought up. Furthermore, the expansion of commercial agriculture in the region can be expected to lead to increasing pressure on land, including land belonging to local communities.¹⁴

The fragments of historical contexts presented so far can be said to point towards legacies that have considerable impact, but still need to be overcome in order for the current (neo-liberal) political-economic framework to provide, in practice, a facilitating environment for agricultural

¹² MLT – *Mozambique Leaf Tobacco*

¹³ For example TechnoServe, ADIPSA, GAPI. Some of the same agencies have given support to the initiatives that are at present identified as pilot projects in a first phase of BAGC, see below.

¹⁴ More on the land issue below.

development, investments and growth. A facilitating environment, by the way, which at the same time puts smallholder farmers to the fore (cf. the AGRA strategy). These historical legacies include: traditions of a highly centralised and/or coercive state; unclear/mixed principles of public-private roles and responsibilities; and weak relations of top-down accountability.

What is fairly clear from this brief review of the historical context is the fact that the current BAGC initiative is not targeting an area of undeveloped ‘virgin’ land. It rather addresses the development potential in a strategic region with a history of changes and contradictions in territorial control and relations between people and land. Still, BAGC must also be seen in the backdrop of an agricultural sector which is “dominated by smallholders who farm in a risky environment that is vulnerable to droughts and floods” (World Bank 2006:3).

The World Bank in its 2006 agricultural strategy report recognized remarkable improvements in agricultural production in Mozambique since the end of the civil war (i.e. mid 1990s). But it also pointed out that agricultural growth had so far primarily been the result of increases in cultivated area and labour input. This was, in turn, the outcome of the return of more than a million migrants after the 1992 peace accord (World Bank 2006: xiii). Post-war demining no doubt played a part by making large areas safe for cultivation, and post-war reconstruction of transport infrastructure at least to some extent facilitated market access for many (but certainly not all) Mozambican smallholders. Now the post-war period is considered to be over. So far, increasing *agricultural productivity* does not seem to have been a major factor in agricultural growth on a larger scale. This is one of the major challenges which the BAGC initiative seeks to address in the Beria Corridor region.

2.2.4 A recent commercial agriculture initiative: Zimbabwean farmers in Manica Province

From 2000 onwards, a series of land invasions seriously affected commercial farms in Zimbabwe. Until then the large (white-owned) commercial farms had formed the backbone of the Zimbabwean economy. The land occupations that escalated from 2000 onwards were reinforced through a new and radical *Fast Track* Land Reform programme launched by the Zimbabwean government. This marked the beginning of large-scale displacements of both farm owners and farm workers in Zimbabwe (Hammar 2008). By February 2003, the Commercial Farmers Union estimated that 2, 300 of their members were no longer farming in Zimbabwe (IDMC 2008:31). Around that time approximately 80 farmer families left Zimbabwe to settle and establish themselves as commercial farmers in Manica Province with the approval of the Mozambican president Chissano, and facilitated by the Governor of Manica.

The economic rationale of the Zimbabweans’ agro-business establishment efforts seemed to be supported by national economic-growth statistics. According to the World Bank (2010), GDP per capita in Zimbabwe was 594 USD in 2000. In Mozambique it was 234 USD per capita – less than half of the national domestic product in Zimbabwe.¹⁵ In 2001 the annual growth rate per capita was 9% in Mozambique and -3% in Zimbabwe. In 2003, the annual growth rate in Mozambique was 3% and -10% in Zimbabwe. By 2005, the calculated GDP per capita in

¹⁵ The statistics are taken from the World Bank website *WDI Online – World Development Indicators*, <http://ddp-ext.worldbank.org/ext/DDPQQ> [accessed 15 March 2010]. *GDP* (Gross Domestic Product) refers to the total value of goods and services produced, measured in current USD.

Zimbabwe had actually fallen to 274 USD, while in Mozambique it had increased to 320 USD, and already surpassed the figures of a Zimbabwean economy in deep crisis.

These macroeconomic figures are, however, only part of the context of the brief boost of the so-called “Manica miracle” in the period 2002-2006. Tobacco-processing and paprika-exporting companies had provided credit and some technical assistance, and together with sunflower, maize and e.g. roses for export, tobacco and paprika were main crops in a period of boosting agricultural production. The boost also involved an estimated 13, 000 small-scale Mozambican tobacco outgrowers. However, a set of different factors, including a sharp drop in international tobacco prices, low repayment of credits and limited delivery of produce by outgrowers, and conflicts between the Zimbabwean farmers and the tobacco processing company MLT, ended up in a series of broke agricultural investment ventures (World Bank 2006a, BAGC 2010).¹⁶

What can be of particular interest with regard to the “failed Manica miracle” in the BAGC context is the potential for analysis of experienced bottle-necks, and the sharing of experience-based knowledge. New initiatives developed by some of the very few remaining Zimbabwean farmers in Manica Province have also been identified in the BAGC concept as projects targeted for a first phase of (so-called) “fast-track” opportunities (BAGC 2010:28-31).¹⁷

During a field visit in connection with the preparation of this report to NORAD, the author of this case study had the opportunity to meet with several of the remaining Zimbabwean farmers, and was impressed by their unabated dedication to commercial farming – but also by their openness and their honesty in pointing out the following:

- A main reason for the *Zim*'s failures was arrogance. In Mozambique that would not get you anywhere, it is the wrong attitude.
- Agricultural techniques must be adapted to the specific agro-ecological conditions in the local area. The variations between Zimbabwe and Mozambique, and within the Beira Corridor region, are big enough to require different techniques and practices.

Some also pointed out that:

- You cannot operate a commercial farm as an “island”. Being the target of envy in a poor rural locality does not work. Thus a thriving commercial farming unit needs to establish good relationships with neighbouring small-scale farmers.
- Accountability is everything! Projects must be based on honest, transparent communication and information-sharing.

In this context it may also be worth mentioning a fairly common phenomenon in Mozambique, mentioned as often by Mozambicans to explain the “failure” of the “Manica miracle” as by the Zimbabweans themselves. This phenomenon is the – excessive – zeal with which Mozambican civil servants tend to follow up some of the existing laws, regulations and decrees through

¹⁶ The author does not wish to go deeper into an analysis of this recent commercial agriculture initiative here. It has been widely reported, and also analysed, elsewhere (Hanlon & Smart 2008, Hammar 2010). It should, however, be drawn upon as a source of valuable information on bottlenecks and critical factors for agro-investments and larger-scale farming initiatives.

¹⁷ A few of these will be discussed in some more detail below.

controls that result in the official's levying of fines. These practices may be explained in several ways. For large commercial companies they may not represent a big problem. But for small-scale operators and 'emerging entrepreneurs' these practices may over time undermine motivation, growth potentials, and economic sustainability. For the development of private-sector initiatives which also involves smallholders and emerging entrepreneurs, a change in organisational cultures and civil servants' attitudes to the public in this regard could be a substantial contribution. The public-private partnership formed for the implementation of the BAGC initiatives could provide a setting for discussing how to promote such a change.

2.2.5 Development corridors and the Strategy for Integrated Transport Systems

The BAGC initiative for agricultural development can very well be linked to and integrated with the *Development Corridors* strategy promoted by the Mozambican Government under the Ministry of Transport and Communications. A *Strategy for the Integrated Development of Transport Systems* was approved by the Council of Ministers (*Conselho de Ministros*) in June 2009.¹⁸ The Beira Corridor is one of the targeted focal areas, in addition to the Maputo Corridor, the Nacala Corridor, and several others. The Strategy rests on the realization that the transport infrastructure in Mozambique needs to move beyond the post-war rehabilitation phase, towards the development of an integrated transport infrastructure, and linked to the global network of transport and communications.

The Strategy document approved by the Council of Ministers further points to the crucial role of the private sector. It states that the secret of the success in the development of a transport system resides in the ability to attract the private sector for investing and operating in it (Strategy p. 61). In this context, however, the Strategy emphasises the need to recognise the existing "dual economic scenario" in Mozambique, where modern sectors co-exist with more traditional productive sectors. The challenge for the Government will be to establish a strategic framework in which the informal private sector can work dynamically with the modern sector within a globalising economy. According to the Strategy, the opportunity lies in the possibility of attracting Foreign Direct Investments (FDIs) which form partnerships with the national private sector, including actors in the informal economy.

However, the Strategy for the Integrated Development of Transport Systems places special emphasis on the logistic potential the Nacala Corridor (in Nampula Province, north of Zambezia). Nacala Port has an excellent natural harbour. The Government has established a 'free industrial zone' (*zona franca*) to promote development in the Nacala region, and according to the Strategy the geographical position of Nacala will, when the present financial crisis has come to an end, have a great competitive advantage in a time of globalising trade east/west and north/south.¹⁹

¹⁸ *Estratégia para o Desenvolvimento Integrado do Sistema de Transportes, Resolução no. 37/2009*, published in *Boletim da República*, 5. Suplemento, 30 de Junho, 2009.

¹⁹ *Estratégia para o Desenvolvimento Integrado do Sistema de Transportes*, p. 106-(60).

2.3 LAND ISSUES AND RELATIONSHIPS BETWEEN LAND USERS

The legal framework concerning land rights in Mozambique is only very briefly mentioned in the BAGC Report (2010), which says that: “All of the land is owned by the Government of Mozambique²⁰. There is an existing land leasing regime which allows commercial farmers to obtain 99-year leases over proposed commercial farmland” (2010:9). The mandate for the current case study requests a more comprehensive discussion of land use and relationships between different categories of land users of relevance for the BAGC partnership initiative.

2.3.1 Legal issues: Rules and institutions

In Mozambique today, the basic principles governing issues of land rights were set out in the National Land Policy of 1995 by a government seeking to harmonize the interests of local communities with private-sector interests, and the promotion of new investments aiming at economic growth (Calengo 2009). The legal basis for land rights, claims, and access to land is spelled out in the (new) Constitution of 1990 (*Constituição da República de Moçambique*) and in the Land Law (*Lei de Terras*) of 1997. The Constitution of 1990 maintained land as State property, while the Land Law of 1997 guarantees access to and the use of land for the local population, as well as for investors. Article 12 states that land rights can be acquired in the following ways (cf. Ikdahl et al. 2005:47-48):

- through occupation by individuals and local communities, according to customary rules and practices that do not contradict the Constitution;
- through occupation by Mozambican individuals who have been using the land in good faith for at least ten years;
- by authorization of an application presented by individuals or corporate bodies in the form defined in the Land Law.

The first bullet point above recognizes and accommodates ‘traditional’ community land rights, as well as individuals’ land rights based on traditional use and occupation. The second bullet point was specifically targeted for recognising rights to land acquired through use and occupation outside ‘traditional’ (inherited) family and community land. It provided a basis for recognising rights to land for the large numbers of internally displaced people during the civil war in Mozambique, and thus to protect their livelihoods after the war. Finally, the third bullet point opens up for access to land through long-term leases to nationals, as well as to foreign investors and companies with concrete investment plans.

Regulations on the implementation of the Land Law in rural areas were passed in 1998. The Land Law Regulations also has a *Technical Annex* approved by the Minister of Agriculture in 1999. The Annex deals with the procedures for identifying the ‘local communities’ whose land rights are recognized through the 1997 Land Law. In principle, community land rights are secure, but can be formalized through a process following proper procedures. The Technical Annex sets out the procedures for delimitation, demarcation and titling (in the form of

²⁰ This is not quite correct. Land in Mozambique is State property (see below), not the property of the – in principle shifting – governments in a multi-party state.

DUATs)²¹. The approach defined in the Annex has been seen as innovative in its use of participatory methods in the delimitation of community land, and in the requirements that both men and women shall participate in community consultations and in the land delimitation processes (Tanner 2001, Chilundo 2004). Some have, however, been concerned that the processes involved in land delimitation and registration are complicated and time-consuming.

At the national level, land administration is the responsibility of the Ministry of Agriculture (MINAG)²² through DNTF (the Directorate for Land and Forests)²³. At the provincial level, it is the Provincial office of Services, Geography and Cadastres, SPGC,²⁴ which is the agency responsible for the implementation of the Land Law regarding land delimitations. *Investment proposals* that involve plans for land acquisitions must, however, go through the Provincial Directorate of Agriculture (DPA).

As ownership of all land in Mozambique is vested in the State, the formal property rights of individuals, communities and corporations have the form of *DUATs*, which recognise the right to use and benefit from the land. Calengo (2009:39) points out that the land-use rights of a private investor, acquired in connection with the presentation and official approval of an Investment Proposal, and represented in a legally acquired *DUAT*, is in legal terms equal to the rights of a community, whose land rights have been acquired by means of traditional use and occupation.²⁵

In 2007, an amendment to the Land Law Regulations of 1998 (Article 35) was passed through Presidential Decree.²⁶ On the one hand, this amendment involves a redefinition of the central Government's role in relation to land rights; it is a move towards more centralisation in the implementation of the Land Law. After the amendment of Article 35, the formalisation of land rights (*DUATs*) up to 1,000 ha requires approval by the Governor, while a *DUAT* exceeding 1,000 ha requires approval by the Minister of Agriculture, and a *DUAT* exceeding 10,000 ha requires approval by the central government's Council of Ministers (*Conselho de Ministros*). While the 1998 Regulations had given the governor of each province the power to formally recognise *DUATs*, the 2007 amendment means that an *approval* is necessary. Thus, in practice, *DUAT* documentation for areas above 1,000 ha must now be submitted to the central government for approval. This may be time-consuming, though the Government has expressed its commitment to speedy processes in this sector. The regulations apply to local communities and foreign investors alike (Calengo 2009:41).²⁷

²¹ *DUAT – Direito de Uso e Aproveitamento de Terra/Land Use and Benefit Rights*

²² *MINAG – Ministério de Agricultura*

²³ *DNTF – Direcção Nacional de Terras e Florestas*

²⁴ *SPGC – Serviços Provincias de Geografia e Cadastro*

²⁵ See the Annex for an overview of the legally defined steps in Project Application and Land Acquisition Processes, elaborated by CEPAGRI, Ministry of Agriculture, Mozambique.

²⁶ *Decreto no. 50/2007, October 16, 2007.*

²⁷ The policy shift implied in the Decree of 2007 has, on the one hand, been interpreted as a result of the central government realizing that “too much power” over crucial resources had been devolved to local people and communities through the 1997 Land Law. On the other hand, it has been interpreted as a concession to private-sector interests, as the new regulations imply restrictions on the areas local communities will in practice be able to control; thus potentially making more land available for investors, agribusiness – and maybe also speculation in land.

For formal approval of *DUATs*, it is further required that both local communities and investors present land use plans/investment proposals for scrutiny and approval by the competent authorities. On this point, investors may, in many cases, have considerable advantages in comparison with local communities, especially regarding resources, capacity, and networks to be drawn on in developing convincing land use and business plans.

2.3.2 Agricultural land available for commercial farming

Government officials in Mozambique will usually claim that there is a lot of land available in the country, that pressure on land is not a problem. At present the population density at the national level is only around 28/km². Still, in parts of the country – such as peri-urban areas, in the Maputo Corridor in particular, and along the coastline – there are clear signs of increasing and pressure on land. The Beira Corridor can also become another hot-spot of increasing land pressure. In fact, representatives of the provincial association of small farmers, UCAMA,²⁸ claim that all land in the Corridor area with some access to transport facilities is already occupied.

In the further development of the BAGC initiative along the lines delineated in the BAGC Report (2010), to what extent land, such as the envisioned “10 million hectares of arable land” (Report pp. 4, 9, 12), is in practice available may require more in-depth analysis. The agricultural potential in the BAGC Report is presented in the following categories²⁹:

BAG AREA LAND ASSESSMENT

<i>Total land</i> area of Manica, Tete and Sofala provinces:	23.000.000 ha	(100%)
<i>Arable land</i> (based on soil and climatic suitability):	10.000.000 ha	(44%)
<i>Land suitable for irrigation</i> (arable land with proximity to reliable water source and transport infrastructure):	300.000 ha	(1.3%)
<i>Potential for new commercial farming</i> (suitable land taking into account a market assessment for maize, wheat, rice, soya, citrus, mango, banana and sugar cane):	190.000 ha	(0.9%)

Mozambican authorities through the Ministry of Agriculture/DNTF have carried out another assessment of land available for investments in agriculture. Taking into account a different set of factors, it also reaches different conclusions.³⁰ The DNTF's *Inventory* of land available for agricultural investments is based on information on current occupation of land. It excludes land under conservation (e.g. national parks), land for mineral concessions etc. The DNTF figures³¹ give the following result for the BAGC area:

DNTF LAND INVENTORY – BAGC AREA

<i>Total land</i> area of Manica, Tete and Sofala provinces:	23.000.000 ha	(100%)
<i>Available land</i> for agricultural investments in Manica, Tete and Sofala:	2.155.900 ha	(9.4 %)

²⁸ UCAMA, the main organization of small farmers working at the provincial level in Manica, was in 1997 formed as an association within the Peasants National Union, UNAC (*União Nacional de Camponeses*).

²⁹ The different categories of land are based on a model for a several-step assessment of different factors, resulting in the categories and areas given above. See BAGC Report (2010:15).

³⁰ DNTF (2008) *Relatório do Zoneamento Nacional*. MINAG/ Direcção Nacional de Terras e Florestas

³¹ Based on Calengo (2009: 44-46).

The area of *Available land* in the DNTF inventory does not take into account the factors used in the BAGC assessment – cf. the two categories ‘Land suitable for irrigation’ and ‘Potential for new commercial farming’ above. The criteria used by DNTF are, by contrast, legal property rights and current land use by local people. These are criteria that result in an area of *Available land* (2.155.900 ha) in the BAGC region which is much smaller than the area of *Arable land* (10.000.000 ha) given in the BAGC report (2010).

The criteria used in the DNTF inventory also merit some further discussion. On the one hand, the DNTF category ‘land in use’ (and thus ‘not available’) may not really have taken into account the fact that local people traditionally have depended on extensive systems of agriculture, such as *shifting cultivation*³². In practice, shifting cultivation means that local people’s livelihoods depend on access to considerably larger areas of land than what is under cultivation at any given point in time. As a typical low-input agricultural system, it is adapted to areas of low population density and subsistence farming. But this also means that local people who acquired ‘user rights’ cover larger areas than may be evident if assessments only take into account currently cultivated plots. This may imply that the figure of ‘Available land’ in the Inventory (above) is actually too high.

As pointed out by Calengo (2009:45), the DNTF 2008 Inventory excludes from the category ‘Available land’ the land for which local communities have acquired formal *DUATs*. In practice the situation may be different. A formal *DUAT* gives a local community a more solid formal basis on which agreements and contracts with investors can be negotiated and formalised following established rules and procedures. Furthermore, for investors and commercial farming units, it may be much easier and less time-consuming to deal with potential partners and neighbouring communities who have clearly defined land rights, and have gone through a process of formalisation, than starting negotiation or land acquisition processes from scratch.

2.3.3 Formalisation of land rights

If less land than initially expected (in the BAGC concept assessment) is in practice available for commercial-agriculture investments in the region, this may provide an argument for allocating new resources to work with the formalisation of local people’s land rights, as recognised in the 1997 Land Law. Competing land claims often come up as a result of increasing value of land. Furthermore, it can be argued that potential conflicts over boundaries can more easily be avoided through proper delimitation processes. In Mozambique this involves the *participation* of local community representatives and community *consultations* as set out in the Regulations and Annexes to the Land Law.

In fact, it may be argued that the allocation of some additional resources to local land delimitation processes in the first phase of the BAGC initiative can, over time, secure a broader, more solid, and locally more legitimate *land base* for agro-investments and commercial farms. Various reports (World Bank 2006a, UNCTAD 2009, Vermeulen & Cotula 2010) point to the importance of legitimacy and trust in relationships between commercial agriculture actors and

³² Also called ‘swidden cultivation’ or ‘slash-and-burn’ agriculture. In Mozambique such agricultural practices have often been associated with *queimadas descontroladas* (“uncontrolled burning”), which is not particularly helpful if the objective is to understand what is actually going on in rural areas.

smallholders – especially outgrowers. For commercial agriculture initiatives it may prove essential both to secure local legitimacy regarding land issues, and build trust in relationships to smallholders, in order to avoid future conflicts over land, as well as over contractual obligations.

Over the last decade, several civil society organizations and agencies have come into being to work with the delimitation and formal recognition of local communities' land rights. State institutions, such as SPGC (under DNTF/MINAG) at the provincial level, primarily act to oversee and control that proper procedures are followed in land delimitation processes, in addition to providing technical expertise. So far, it seems state institutions normally do not initiate or assume the responsibility for land delimitation initiatives and processes at the district or provincial level. This means that civil society organisations, NGOs and donors are key actors in the local implementation of the Land Law.

Two main agencies working in this field at the national level are also represented in Chimoio, Manica: ORAM³³ and iTC³⁴. Both agencies represent considerable experience in working with local community organisation and negotiation processes, and can in this way represent some aspects of local smallholder interests in relation to BAGC.³⁵

It is common knowledge in the BAGC area that a number of land concessions in Manica Province over the last decades have been granted to a range of well-connected individuals and corporations. But apparently no complete overview over who has which interests in land is currently available. Property rights in land may have been acquired through claims presented during the process of restructuration and privatisation of state farms, and/or obtained as leases of 99-years under the Land Law of 1997. A number of communities have also had their land rights (*DUATs*) delimited and registered according to the rules and procedures of the Land Law Regulations. A comprehensive overview over available agricultural land in the Corridor area, combining agricultural potential with information on property rights in the form of and current land use patterns, approved *DUATs*, leases etc. would no doubt be of value for the BAGC partnership. But not only for the private sector and potential investors, also from a civil society

³³ ORAM – *Organização Rural para Ajuda Mutua* – has at both national and regional levels been the main agency dedicated to the formalisation of local-community land rights since 1997, and was actually established on the initiative of the Christian Council of Mozambique, as a civil society organisation to work with the implementation of the Land Law. At present it is the Mozambican organisation which has accumulated most experience with land delimitation processes, and also serves as a knowledge pool (and sub-contractor) for other NGOs and institutions entering the field of land delimitations. ORAM depends on donor funding, and has been supported by e.g. Ford Foundation and Norwegian People's Aid (NPA).

³⁴ iTC – *Iniciativa de Terras Comunitárias* – was established in 2006 with a pilot phase 2006-2010. It was based on cooperation between the Mozambican Government, civil society and donors. DfID has been the lead donor from the start, while the consulting company KPMG-Mozambique has had the executing responsibility, supported by NRI (National Resource Institute) at the University of Greenwich in the UK. Mozambican civil society is represented by e.g. CTV – *Centro de Terra Viva* – and UNAC – *União Nacional de Camponeses*. The office of the national coordinator of iTC is located in Chimoio. The role of iTC has primarily been to serve as a fund to finance land delimitation processes, to which NGOs and communities can apply for funding. It has also served as an intermediary between diverse institutions and interests, with a mandate to represent local communities' interests in land.

³⁵ The iTC has undergone a series of evaluations, e.g. Calengo (2009).

perspective, and for potential donors, such a comprehensive overview including *cadastral* information,³⁶ would be of considerable value in planning, as well as in future decision-making.

2.3.4 Foreign Direct Investments and recent large-scale land acquisitions

CEPAGRI – the Centre for the Promotion of Agriculture³⁷ – has been established as a unit under the Ministry of Agriculture to facilitate public-private partnerships (PPP) in the agricultural sector. In this capacity CEPAGRI also has a coordinating role for private investors in agriculture, including a consultative role in relation to foreign direct investments (FDIs) which involve large-scale land acquisitions. According information provided by CEPAGRI, six projects involving large land areas (between 10,000 ha and 173,000 ha) were approved by the Council of Ministers in the period 2008-2009. Five³⁸ of these were located within the three provinces of the BAGC region. These were:

Project name	Activity	Area involved	Province
PORTUCEL	Pulp production based on eucalyptus	173,327 ha	Zambezia
ENERTERRA	Biofuel (biodiesel) production based on Jatropha	18,508 ha	Sofala
PRINCIPLE ENERGY	Biofuel (ethanol) production based on sugar cane	18,000 ha	Manica
GROWN ENERGY	Biofuel (ethanol) production from sugar cane/millet	15,000 ha	Sofala
QUIFEL AGRÍCOLA	Extraction of oils from sunflower and soya	10,000 ha	Zambezia

Among the five projects in the overview above, two (EnerTerra and Principle Energy) are listed among “Key projects in the Beira Corridor” annexed to the BAGC Report (2010, Annex A). One project, Grown Energy, is identified in the Report (2010:30) as a project targeted for a First Phase of the BAGC initiative.

2.4. KEY ELEMENTS IN THE BAGC INITIATIVE

2.4.1 Background and actors in BAGC

The BAGC partnership started out as a high profile initiative, with Yara in the role first as a convenor, then as a catalyst and lead partner, in collaboration with AGRA. At the World Economic Forum in Davos in January 2009, a workshop was organised to discuss the more general ‘Agricultural Development Corridor’ approach. Mozambican government representatives at the meeting found this to be an interesting initiative. The approach was further concretized during 2009, with contributions from consulting companies such as Prorustica³⁹ and InfraCo/AgDevCo.⁴⁰

³⁶ *Cadaster*: an official register of property boundaries, with information on value and ownership.

³⁷ CEPAGRI – *Centro de Promoção da Agricultura*

³⁸ The sixth project approved, located outside the BAGC region, was LURIO GREEN RESOURCES, with a concession area of 126,000 ha for production of pulp based on eucalyptus and acacia in the provinces of Nampula and Cabo Delgado.

³⁹ *Prorustica Ltd.* is an international development consultancy, based in the UK, and providing solution-oriented services (according to the company’s website). Patrick Guyver is Managing Director. <http://www.prorustica.com/> [accessed July 22, 2010]

⁴⁰ *InfraCo* is a project development company created in 2005, focusing on the development of infrastructure services (e.g. irrigation). It is donor-funded (DFID, SIDA, Dutch cooperation etc.) but privately managed, and seeks to act as an “honest broker” in creating “viable infrastructure investment opportunities that balance the interests of host

On 20 January 2010, an Inaugural BAGC Partnership Meeting was organised in Maputo. Here an initial BAGC Investment Blueprint, elaborated by InfraCo/AgDevCo, was presented for discussion to attendees representing the Mozambican government, private sector and international development agencies. Immediately after this meeting, the BAGC initiative was launched at the 2010 Economic Forum in Davos (by InfraCo's Chairman). Here the complete BAGC Report (2010) was presented. It includes an indicative financing plan for the period 2010-2030, in addition to a more short-term, so-called "fast-track" or "ready to go" project portfolio for a first phase (the period 2010-2015).⁴¹

On 2 March 2010, during the Norwegian Minister of Development Erik Solheim's visit to Mozambique, a launch of the BAGC initiative was organised "in the Corridor", at Beira Port, with the participation of representatives from the Government of Mozambique, provincial authorities, and the private sector, including Yara International.

Yara International has played several roles in the development of the BAGC initiative, which are in turn related to Yara's development of its own profile as a main producer and supplier of fertilizer globally, but also as a socially responsible global agri-business player seeking to influence agricultural policies, promoting food security and ('green revolution') modernisation in the agricultural sector in sub-Saharan Africa. Thus Yara is seeking to combine forward-looking business models with social corporate responsibility, e.g. through public-private partnerships.

On the other hand, as a producer and supplier of chemical fertilizer, Yara operates as a commercial company seeking maximum profits for its investments. In the Beira Corridor, Yara saw a potential to play a role in supplying and distributing fertilizer for a potentially growing market for agricultural inputs, and had plans for large-scale infrastructure development (a central point for loading, storing and mixing fertilizer) at Beira Port. However, during the first half of 2010, detailed studies of soil mechanics and waterlogging at the projected construction site in Beira revealed that not only the specific building site, but the larger area was unsuitable for such larger-scale heavy constructions. As a result, Yara is by mid-2010 shifting its main focus to the SAGCOT Agricultural Development Corridor in southern Tanzania.

2.4.2 Central concepts in the Agricultural Development Corridor approach

Key elements in the conceptual framework and academic argument underlying the more concrete BAGC and SAGCOT initiatives are set out in Palmer (2010) *Agricultural growth and poverty*

governments, the national and international private sector and providers of finance". The Chairman of the InfraCo board is Keith Palmer, who is also the Executive Chair of AgDevCo. <http://www.infracoafrica.com/about.asp> [accessed July 14, 2010].

AgDevCo was established as a separate development company in 2009. As a non-profit agricultural project development company, it acts as an investor to develop agriculture enterprises at an early stage, seeking to provide "transformational benefits" for smallholder farmers and communities, aiming to withdraw (by sale of interests) when its services are no longer needed. AgDevCo has been a central actor in the work that resulted in the presentation of BAGC in Maputo and Davos in January 2010. AgDevCo has also been involved in the work with the SAGCOT initiative in Tanzania. Chris Isaac is Director of Business Development in AgDevCo. Han Derksen is Director of Development. <http://www.agdevco.com/> [accessed July 22, 2010].

⁴¹ The first phase (2010-2015) projects will be discussed in some more detail below.

reduction in Africa: The case for patient capital. In relation to BAGC, the concept paper provides a set of answers to questions such as:

- Why have private investments in the agricultural sector so far been limited in African countries such as Mozambique and Tanzania?
- What is required to promote investments in agriculture?
- Why should (public) donor-funding be allocated to private-sector commercial enterprises?

The simple answer given to the first question is “lack of sufficient profitable investment opportunities” (Palmer 2010:3). This lack of opportunities is, according to the paper, a result of what is called the “greenfield” (immature, early) stage of agricultural development (p. 7). *Greenfield agriculture* is characterised by being particularly risky (p. 8). And with high risk, investors will require high returns, while “many greenfield agriculture ventures have low expected returns” (Palmer 2010:8).

How can this inherent contradiction be overcome? The *agricultural growth corridor* approach is presented by InfraCo/AgDevCo as a solution to the high risks and low returns of ‘greenfield agriculture’.⁴² In his 2010 concept paper, Palmer emphasizes the benefits of *economies of scale* (p. 8). Now, the advantage of economies of scale has been a contested issue in debates over agricultural and rural development for many years (cf. Ellis & Biggs 2001, Vermeulen & Cotula 2010)⁴³. The basic element in Palmer’s argument in favour of economies of scale is the high costs of installing infrastructure. He asserts that: “...it is unquestionably the case that small farmers cannot generate enough value to pay for the cost of installing infrastructure with its high fixed costs” (2010, footnote 12).

Access to *patient capital* is presented as the means to overcome the barriers created by the high start-up costs of necessary infrastructure. Patient capital is more specifically defined as “long-term capital made available by the international community on concessional terms” (Palmer 2010:11). The idea is that this form of financing is needed to cover (part of) the costs of installing “irrigation and related agriculture-supporting infrastructure” (op.cit.).⁴⁴ In practice, it means there is a need for a certain amount of long-term subsidy – from the government and/or international agencies/donor funding – to establish the necessary larger-scale infrastructure, especially irrigation. Basically it is through the argument concerning the ‘barrier’ created by the high start-up costs of agriculture-supporting infrastructure that the BAGC concept provides an answer to the question: Why should donor-funding be allocated to private-sector commercial enterprises?

⁴² Cf. Presentation on Agricultural Growth Corridors by Chris Isaac, AgDevCo: http://www.agdevco.com/-images/stories/pdf/GENERAL_REPORTS/Event_Presentations/agricultural%20growth%20corridors-%20making%20agriculture%20competitive.pptx.pdf [accessed 15 July 2010]

⁴³ Ellis and Biggs discuss the “continuing success of the long-running ‘small-farm efficiency’ paradigm” (2001:437). While Vermeulen and Cotula (2010:14) hold that “plenty of evidence...suggests that, where put in a condition to work, smallholders are able to produce competitively and seize new market opportunities”.

⁴⁴ There seems to be a contradiction in Palmer’s argument on the benefits of ‘economies of scale’ and the need for ‘patient capital’. This does not, in itself, undermine his strong argument for the need of ‘patient capital’ to promote (or “kick-start”) agricultural development. But it weakens the connected argument for the benefits of economies of scale.

The BAGC concept operates with altogether three *types of capital* needed for the agricultural development boost envisioned in the Beira Corridor. These are:

- *Patient capital* to (partly) finance larger-scale infrastructure development, such as irrigation
- *Social venture capital* as start-up capital for commercial investors with commercial agriculture development plans – which also serves smallholder farmers
- *Working capital* made available through a revolving credit facility accessible to both medium and small-scale farmers (BAGC Report 2010:34)

Another central element in the approach presented as part of the Agricultural Corridor initiative is (basically) two different models for solving the challenge of *how to integrate smallholders into a dynamic process of commercial agricultural development*. Or in more concrete terms: two models for linking up a commercial (farming) unit with neighbouring smallholder farmers. The BAGC Report (2010:22) explicitly states that: “It is essential that the smallholder farmers in the corridor benefit from the growth of commercial agriculture”. Palmer’s concept paper sets out structured linkages between “commercial farm hubs” and “smallholder farmers living in the area” as a central element in the business model promoted (2010:15). The two models of organising commercial units & smallholders delineated by Palmer can very briefly be described as:

- An *outgrower model*, consisting of a commercial farm hub which provides services (e.g. extending irrigation or storehouse facilities) to *outgrowers* – in the form of smallholders (or organized smallholders) in the area.
- A *serviced farm blocks model*, with a serviced and irrigated area managed by a leasing company, (sub) leasing farm blocks of different sizes to both commercial and small-scale farmers. Services provided would include electricity, finance and inputs (seeds and fertiliser), in addition to access to markets and extension services (BAGC Report 2010:22).

These two models can both be said to fall under the more general category of *contract farming*, referring to pre-agreed supply arrangements between farmers and buyers. Contract farming usually consists of local farmers growing and delivering a specified amount of produce of a specified quality at an agreed date (Vermeulen & Cotula 2010:39). The buyer is often a company which provides up front inputs such as credits, seeds, fertilizers etc. The price is usually pre-agreed, but can also be set with reference to spot-market prices (op.cit.). There is, however, an enormous diversity in local arrangements, and they also tend to shift over relatively short time periods (Vermeulen & Cotula 2010 op.cit).

A 2006 World Bank report points to contract farming as an instrument of providing credit to farmers, especially to produce cash crops in situations of “poor performance of the financial system”, which is the case in rural Mozambique (World Bank 2006a:15). But contracting companies in commercial agriculture should, according to this report, not be seen as (micro) finance institutions. The companies provide services to farmers primarily because they are interested in access to the farmers’ products for the purpose of processing and marketing (World Bank 2006a:5).

The *outgrower model* in the BAGC concept (as referred to above) in this World Bank report is called ‘Nucleus Estate Model’. It is referred to as a variation of a more general ‘Centralized Model’, where a company/promoter “provides support to the production of the crop by smallholder farmers, purchases the crop from the farmers, and then processes, packages and markets the product” (World Bank 2006a:6). The Nucleus Estate Model implies that “the promoter also owns and manages an estate plantation” (op.cit. p. 7). In comparison with the outgrowers’ landholdings the Nucleus Estate is often fairly large, and can thereby provide a certain guarantee of delivery of produce to a processing plant or buyer/market.

2.4.3 BAGC: First-phase (2010-2015) pilot project opportunities and actors

The present study can only address some aspects of the BAGC partnership initiative and the Investment Blueprints presented so far. It will not deal extensively with the proposed organisational and financial mechanisms described in the BAGC Report (2010) and in the Beira Corridor proposal document dated February 2010.⁴⁵ These aspects will doubt be dealt with in due appraisals carried out by potential donor agencies, such as DfID and Norad. What seems most relevant to discuss in some more detail here is the approach to integrate smallholders into commercial agriculture and the models set out for organising the relationships between *commercial units & smallholders* in a developing commercial agriculture.

Norad’s funding for this case study made a visit to the Beira Corridor area possible, carried out in April 2010. It made it possible to visit some project sites and enter into more grounded discussions with a range of local actors in the field. These included local business entrepreneurs and future project managers, as well as well-informed people working in agricultural development, land issues, farmers’ organisations and business associations in the area. A basic point of reference for the field visit was the BAGC 2010 Report, and more specifically the Investment Blueprint developed for the first five years (2010-2015).

The 2010-2015 Investment Blueprints briefly present 12 pilot projects (BAGC Report 2010:28-31). It is expected that the longer-term viability of the BAGC partnership will depend on its ability to “deliver” in the first phase. The BAGC Proposal Document clearly states that “All parties including the government are anxious to ensure early visible progress towards implementation of some of the Fast-Track opportunities identified in the Investment Blueprint” (p. 8). In this way the long-term viability of the BAGC partnership also depends to a great extent on the development and success of the selected first-phase pilot projects. They also merit some further discussion here⁴⁶.

It should be pointed out that the BAGC initiative has already created a process with a certain momentum, which new actors and initiatives may join. It represents an initiative to promote an integrated approach to agricultural development that most agri-business interests in the region both see as necessary and welcome. It is also seen as an opportunity to bring a range of different actors and agencies together, and coordinate interventions. The specific projects identified for the

⁴⁵ The proposal concerns the “BAGC Secretariat and Catalytic Challenge Fund: Financial Proposal 2010-2012”.

⁴⁶ I am very grateful to Han Derksen, AgDevCo, who carried out a good deal of the on-site work for the BAGC Investment Blueprint, and provided me with background information and contact details, in addition to facilitating contacts with potential ‘project owners’ in the Manica area.

pilot phase have, however, basically been developed with the support of a range of other agencies and facilitators at provincial (mainly Manica) and national levels in Mozambique.⁴⁷

In general, the twelve selected BAGC pilot projects were identified taking into account their potential, according to the BAGC assessment, to deliver on a *commercially sustainable basis*. At the same time these projects are expected to “involve significant benefits for smallholder farmers” (BAGC Report 2010:29). But each of them has “specific constraints”, which must be overcome before they can go ahead. These constraints include the need for access to ‘social venture capital’ and/or ‘working capital’, while other projects also require infrastructure development (BAGC Report 2010:29). Irrigation is considered a key element in infrastructure development, in addition to transport systems.⁴⁸

The defined mandate for the current study was to look more specifically into questions about land use, relationships between different categories of land users and, taking specifically into account smallholders’ interests, how relationships between smallholders and commercial-farming units are being organised. A first step in this discussion would have to be a categorisation of the projects identified for the first phase (the 12 *pilots*) with reference to the *models* of organising these linkages presented in the BAGC concept. A next step would be to discuss how the defined models for linking up commercial farming units/companies with smallholder farmers would work in the organisation of future commercial-farming development (also) benefiting smallholders in the Beira Corridor area.

⁴⁷Such as SNV – Netherlands Development Organisation in Mozambique which has offices in both Maputo and Beira. SNV seeks to enable those with the lowest incomes to be part of social and economic networks and in this way increase their income and employment opportunities. SNV focuses on capacity development and has particularly in Manica Province worked with the development of banana value chains.

Agrifuturo is an agri-business programme started in Mozambique in 2009, supported by USAID. It has a focus on value-chain development of selected crops (including bananas in Manica), and seeks to “build linkages between agri-business and financial services providers” and furthermore “increase and strengthen public/private partnerships”. *Agrifuturo* also works in the Beira Corridor area, focusing on “emergent farmers” rather than smallholders. <http://www.agrifuturoproject.com/index.php> [accessed August 3, 2010]

ADIPSA – Apoio ao Desenvolvimento de Iniciativas Privadas no Sector Agrário/Support to Development of Private Sector Initiatives in the Agricultural Sector – has been one component in DANIDA’s support to agricultural sector development in Mozambique over the last years. This support also included the Mozambican Government’s National Agricultural Programme (PROAGRI). A main objective of the ADIPSA programme has been to improve the access of smallholder products to markets by providing improved access to financial services, inputs and technical advice, and facilitate a business plan development. With regional representation in Manica, ADIPSA also has some experience with support to outgrower schemes, and has more directly supported smallholders getting involved in cash crop production (e.g. sesame).

TechnoServe is an international organisation providing “business solutions to poverty”, seeking to help “entrepreneurs in poor areas of the developing world to build businesses”. *TechnoServe* also works in Mozambique and has a representative in Maputo. <http://www.technoserve.org/who-we-are/index.html>

⁴⁸ The World Bank is at present developing a project for *Sustainable Irrigation Development* (PROIRRI) along the Beira Corridor with the aim of enhancing agricultural productivity and profitability of smallholder farms in targeted (new and improved) irrigation schemes. The project is expected to cover around 5,000 ha of irrigated land. A basic principle is that the project should be demand-driven, in the sense that prospective smallholder beneficiaries should be organised and request assistance to develop irrigation, but they should also be able to pay for and be willing to participate in the maintenance of the irrigation systems that the World Bank project will finance. These include both large-scale rice irrigation in Sofala Province and small-scale irrigation for horticulture in Manica.

A first difficulty seems to be that many of the pilot projects do not fall that neatly into the concept-paper models. Still an effort has been made below to present a clear and distinct list of the 12 pilot projects using the two *models* presented in the BAGC concept (*Outgrower* and *Serviced farm block*) as a point of departure. In addition, a third category has been added, called *Extension and marketing for smallholders*, to accommodate at least four of the pilots projects⁴⁹ Though the BAGC concept did not focus much on land and local property relations, in the overview below a column on land – and labour – has been added. It can be argued that local land-property and labour relations have important implications for how different contract farming models and other forms of value-chain integration can work in practice. More detailed information on all the projects would, however, be necessary to enter into a more comprehensive discussion of this issue.

2.4.4 BAGC first-phase: identified pilot projects⁵⁰

Outgrower model projects	Location (& <i>project name</i>)	Approx. Land Area/ Local People involved
*Banana plantations	Manica Province, Manica District <i>Phoenix & others</i>	50-100 ha plantations/ with outgrowers or 'emerging farmers'
Mixed farms	Manica Province, Several locations	450 ha commercial farms, 400 ha smallholder farms
Fresh produce for mining industry	Tete Province, <i>Benga project</i>	300 ha commercial farm + selected, associated outgrowers
Sugarcane/sorghum for ethanol and food crop beans	Manica Province, Sussundenga District <i>Envalor</i>	25.000 ha plantation/ with 1800 farm workers and/or outgrowers
Sugar cane for ethanol & food crops production	Sofala Province <i>Grown Energy</i>	20.000 ha plantation/ ⁵¹ with 2000 farm workers, 3000 ha for outgrowers (serviced farm block model?)

⁴⁹ Based on information in the BAGC Report (2010:30-31), with Annexed Project Summaries, complemented with information in the BAGC Project proposal of February 2010.

⁵⁰ An initial categorisation, primarily based on available written information on BAGC. The projects marked with* indicate that some more in-depth information on these projects was collected during field visits to Manica and Sofala Provinces in April 2010.

⁵¹ According to CEPAGRI, Grown Energy only got approval for 15,000 ha in 2008-2009 (cf. info given above). The land areas given in the BAGC Report (2010) may only be approximates, or other factors influence available figures.

Serviced farm block model

Mango & litchi plantation	Manica Province, Sussundenga District	200-600 ha plantation/ farm workers + farm-block outgrowers (?)
*Citrus farming	Manica Province, Manica District <i>Produsola</i> (and others)	Nursery established, plans for marketing and outgrower schemes
Rice irrigation scheme	Sofala Province: <i>Munda Munda</i> / <i>Planalto</i> projects	3,000 ha of irrigation rehab. involving local Water Users Association

**Extension and marketing
for smallholders**

Seed growing and distribution	Manica Province/ Chimoio <i>Progene</i>	Providing improved seeds to networks of farmers (e.g. <i>Planalto</i> project)
Family food-crop commercialisation	Manica & Sofala Provinces/ Chimoio	Growers in clubs of 10/12, totalling 4,800 ‘promising’ farmers
*Maize storage, milling & marketing	Manica & Sofala Provinces/ Chimoio <i>Planalto</i>	Commercial services/ sales coop. involving up to 29,000 smallholders
*Honey collection and marketing	Manica & Sofala Provinces/ Chimoio	Commercial services & quality control, outreach: up to 10,000 collectors

2.4.5 Comments on the BAGC pilot project overview

The pilot projects listed in the schematic overview above are fairly diverse on several dimensions. First, with regard to scale and land areas occupied for cultivation by plantations/commercial farming units, it appears that biofuel projects stand out as a category apart. The two biofuel projects among the BAGC pilots, the *Envalor* and *Grown Energy* projects, have plans for commercial cultivation of between 15/20,000 ha and 25,000 ha, while the other commercial farming units plan to occupy between 50 ha and 600 ha.

With regard to the question of how local smallholders are integrated into the commercial ventures in terms of organised contract farming, it is not quite clear from available information what models the two biofuel projects intend to use. *Envalor* apparently plans to engage a high number of farm workers, while *Grown Energy* to a larger extent plans to use outgrowers. However, the outgrower scheme described for *Grown Energy* seems to resemble the *serviced farm block* model as defined in the BAGC concept. For the present case study it was,

unfortunately, not possible to make field visits to get more detailed on-site knowledge on these large-scale commercial ventures. From the available written information on the first-phase BAGC projects, it is not clear if the Mango & Litchi plantation listed under the *serviced farm block* model in the overview above actually plans to implement this model or rather plans to use the outgrower scheme.

Now, it may be asked 'what difference does it make'? A significant difference between block-farming and outgrower schemes, as defined in the BAGC concept is, in fact, property relations to land. While outgrowers are supposed to farm their own land, serviced farm blocks are supposed to be leased by the farmers. On the other hand, it should be expected that the choice and implementation of linkages between commercial farming units and local smallholders would be a flexible and adaptable issue. Relevant questions in this regard will, however, be: On what basis (information, experience) are choices made, factors and interests taken into account, and models adapted to local conditions and maybe replaced by other arrangements? (How) can local smallholders contribute constructively to or influence this type of decisions and processes?

Some of the plans for the pilot projects in the overview are already developed to a point where specific modes of organising local communities of outgrowers and/or smallholders for a specific crop are well defined. This appears to be the case with the farm run by *Phoenix* in the Banana plantations project in the *outgrower* category above. In this case concrete plans for the scheme have been defined, the contracting relationships have been carefully considered by the commercial farmer, and initial relationships that can potentially be turned into outgrower contracts – depending on financing for the outgrower scheme. With regard to the Citrus farming project, its listing in the *farm block* category may be more questionable (but follows BAGC Report 2010:31). What is at present in place is an excellent nursery, run by *Proodusola*. What is required, and planned, is the development of an off-take market and/or outgrowers who can use the available plant material for fruit production.

For the projects in the *extension and marketing* category, the comments will be based on more detailed on-site information on two projects obtained during the field visit to Manica in April 2010. This category of projects is not based on a central/commercial unit occupying land, but on contractual relationships on delivery of goods and services between a central commercial unit and fairly large numbers of smallholders/producers. The central unit provides inputs/services and marketing while the smallholders provide the products for sale.

The Maize storage & marketing project is planned to work with smallholders organised in sales cooperatives, organised through APAC⁵². The project can be seen as a response to small scale farmers' requests for more secure, stable and formalised marketing arrangements for their main produce, commonly maize. Three large storehouse/delivery points have been constructed with funding from the Dutch Embassy in Maputo, and local agreements made to supply e.g. World Food Programme. The organisation of commercialisation through smallholder cooperatives can

⁵² APAC – *Associação de Promoção de Agricultura Comercial* / Association for the promotion of commercial agriculture. APAC was created in 2006, and surged from work to developing value chain approaches within ORAM in Zambezia Province. It is a member of the national *Associação Moçambicana de Promoção de Cooperativismo Moderno* – the Mozambican association for the promotion of modern cooperativism.

be seen as an alternative to outgrower schemes in terms of organising linkages between smallholders and markets, and at the same time achieving benefits of scale. The concrete organisation of the central ‘hubs’ in terms of decision-making, pre-payments and accountability may, however, still represent challenges which need to be overcome in order for this model to work.

Finally, one of the selected pilot projects, the Honey project, aims at sustainable collection/harvesting of a locally available natural resource product (honey). The project will contribute by developing commercialisation aspects through improved quality control, processing and marketing. In this project, ground work to organise future honey suppliers is already initiated through training and forming local-level associations. The central commercial unit will provide improved beehives, training and quality control to access new markets for local honey production. The linkages between the commercial unit and the small scale producer may in this project organisation be more open and flexible than e.g. in the majority of outgrower and farm-block models.

Generally, an outgrower model implies that a farmer is provided with essential inputs of significant value (seeds, fertilizer etc.) before production starts, which, in turn, gives the smallholder relatively little space for negotiation of e.g. prices. In a serviced farm block model this factor of farmers’ dependency may increase, with both agricultural inputs and land provided by the central commercial unit. In Manica, local representatives of UCAMA⁵³ specifically mentioned “dependency” in contract farming arrangements as their concern. Seeing their organisation’s role at present to be one of contributing to strengthening smallholders’ negotiating power and defending smallholders’ interests, especially with regard to the prices paid for smallholders’ products.

2.4.6 Present challenges

BAGC is a PPP (public-private-partnership) initiative aiming to develop commercial agriculture in three provinces in central Mozambique: Sofala, Manica and Tete. At present Norad is considering the future role of Norwegian development cooperation in the further development of the BAGC partnership. At the moment, Yara International is in the process of redefining or adapting its role as a lead (private) partner in the partnership to a new situation. Recently, changes have been made in the company’s short-term business plans in the region. With the recent complications detected affecting Yara’s investment plans in Beira Port, the company is shifting its immediate focus to the further development of plans for the SAGCOT partnership in Tanzania. This is basically how international capital operates in a globalised economy. Still, with regard to the BAGC initiative it brings up at least two sets of related questions:

The first relates to other *partners’ roles and responsibilities* in the short- and medium term. The involvement and interest on the part of Norwegian development cooperation in this partnership initiative has clearly been related to Yara’s role in its development. However, decisions on funding development programmes and projects through Norwegian development cooperation should in principle be independent of Norwegian companies’ shifting interests and priorities. In

⁵³ The Provincial union of farmer’s associations in Manica

the present situation, the only option for official Norwegian development agencies seems to be to provide further support. The question would rather be: on what conditions?

The next step in the development of the BAGC initiative is, according to plans, to establish a BAGC Secretariat in Beira, which is not only the port but also the capital of Sofala Province. The local/regional business association ACIS – *Associação de Comercio e Indústria* has been identified as a host/ institutional platform to play a key role in the further planning, implementation and monitoring of the activities, a role which is expected to develop into a (separate and more independent?) BAGC secretariat. ACIS is, in fact, a business association with a high degree of legitimacy and excellent reputation in the Corridor area. It is membership-based and basically funded through membership fees. In the further development of BAGC, including a secretariat, it seems important to delineate a role for ACIS which does not jeopardise its present role and functioning as a recognised independent member organisation.

The second set of questions relate to the more general issue of ***accountability in public-private partnerships***. What models of accountability apply, and who is accountable for what and to whom? Private companies are accountable to their boards, primarily for the “results line” in their accounts. When a PPP initiates an initiative to promote development of commercial agriculture in a fairly high-risk environment, the “partnership” as such will hardly be accountable. Then maybe it is the public partners involved that have to assume the roles involving accountability?

The partnership model can also be seen as a process, involving facilitation of communication, learning, knowledge-sharing and synergies between different sets of actors. In this respect, NORAD’s initial concern with the representation of small scale farmers and their interests in the PPP initiative can be seen as a constructive challenge. Here a more specific recommendation with two elements will be put forward – for consideration and further discussion and/or development:

- The creation of a local Think-Tank Forum for commercial agriculture within the BAGC platform. Members should not only represent commercial farmers who are trying out different contract/link-up arrangements, interested institutions represented at provincial levels (Banco Terra, CEPAGRI etc), development agencies (with a local presence) working in agricultural development, but also civil society organisations at the provincial level, in addition to local farmers’ representatives.
- The Think-Tank Forum should be supported and followed up through a donor-funded process-research project, drawing upon some administrative support from the BAGC secretariat and/or ACIS, but aiming to carry out research committed to producing ‘independent’ and useful knowledge to be fed into the further development of best practices for organising and monitoring relationships between commercial units and smallholders.

3. CASE STUDY: TANZANIA

3.1. AGRICULTURAL DEVELOPMENT IN TANZANIA

The agricultural sector in Tanzania has not performed according to the government's expectations regarding contributing towards national economic growth or poverty reduction among smallholder producers (Ministry of Agriculture, Food Security and Cooperatives & FAO, 2008; TNBC, 2009). Presently, Tanzania is totally dependent on agriculture as agriculture value added constitutes 45% of GDP and 75% of the population is rural (World Bank, 2009). Regarding national food security, the country is doing rather well with an average food self sufficiency rate of 102.5% for the last six years (Ministry of Agriculture, Food Security and Cooperatives, 2008). Since 2004/05, the country has been self-sufficient in food and the self-sufficiency ratio was 104% in 2007/08 (United Republic of Tanzania, 2009). Agriculture is important for food security, employment, poverty reduction and contribution towards economic growth and development. The challenge for Tanzania is to go beyond national food security and use the potential embedded in agriculture to contribute towards poverty reduction, growth and development without compromising food security or the rights of smallholders and pastoralists.

Growth in the agricultural sector is below the *MKUKUTA* (the National Strategy for Growth and Poverty Alleviation) target of 5% and the export earnings from agriculture are meager (Ministry of Agriculture, Food Security and Cooperatives, 2008). In 2009, it is interesting to note that gold constituted 40.9% of the export earnings (Mkulo, 2010) as world market prices for gold are high. Data from the Household Baseline Survey (HBS) 2007 show a decline in income from agriculture from 60% in 2000/01 to 50% in 2007, suggesting that rural households are equally dependent upon off-farm as on-farm sources of income (United Republic of Tanzania, 2009). The Tanzanian Poverty and Human Development Report 2009 finds that households dependent upon agriculture are the poorest in the country – 74% of poor Tanzanians are primarily dependent upon agriculture, that the terms of trade for farmers deteriorated from 2000/01 to 2007, and that the trend among farming households are to diversify into non-farm activities to escape poverty (United Republic of Tanzania, 2009: 24). In the period 2000/01 to 2007 there has been a rise in one million people living in poverty, but proportionally there has been a decrease from 35.7% to 33.6% people below the basic needs poverty line (United Republic of Tanzania, 2009:11; Corta & Price, 2009). Young people are reported to run away from agriculture as the future for making a decent living is just not there (TNBC, 2009). Rural poverty rates are reported to be 37.6% compared to 24% in urban areas, except Dar es Salaam which has a poverty rate of 16.4% (United Republic of Tanzania, 2009:11).

There are many reasons for why the agricultural sector in Tanzania has not performed better in contributing to economic growth and poverty reduction in the country. These reasons can be categorized as either *technical* e.g., low productivity, poor infrastructure, insufficient credit and input supply, drought and water constraints, weak delivery of extension services, or *political* such as lack of markets, unfavorable agricultural policy (e.g., restrictive marketing, unfavorable farmer gate prices, taxes, export bans, unpredictability), institutional failure, corruption and lack of thrust (Hella, Haug & Kamile, forthcoming; United Republic of Tanzania, 2009; Ministry of Agriculture, Food Security and Cooperatives, 2008; Ministry of Agriculture, Food Security and

Cooperatives & FAO, 2008; Hella *et al.*, 2007). Regional and district authorities have the power to declare their jurisdictions as food insecure and thereby restrict the movement of maize, wheat and rice which constrain local producers and traders who are unable to take advantage of higher prices elsewhere (United Republic of Tanzania, 2009). Difficulties in accessing both local and international markets, bans on crop exports or cumbersome export procedures, local taxes, export taxes and unpredictable policies do not create a conducive environment for boosting production. According to the Tanzanian Poverty and Human Development Report (2009), farmers respond to the unfavorable conditions by growing smaller volumes of crops and by making income other than from agriculture (United Republic of Tanzania, 2009).

3.1.1. Kilimo Kwanza (Agriculture First)

The agricultural sector in Tanzania has gone through several reforms including the famous Ujama (1967-1985) and the more recent different liberalization phases from 1985 to date. Corta & Price (2009:4-5) identify the following three different problem-solution models for agricultural development in Tanzania:

- a) *Problem:* Over-regulation of crop markets, monopoly power concentrated in larger cooperatives/private firms, corruption, low farm gate prices relative to export prices, lack of incentives to produce for cash.
Solution: Lift regulations, reduce cooperative power, liberalize markets to raise farm gate prices and incentives to produce, do away with corruption.
- b) *Problem:* Further liberalization will only enable traders to exploit farmers and keep farm gate prices low; resource poor farmers cannot afford inputs.
Solution: Re-agrarianise Tanzania through pro-poor farming support via extension, selective input support (smart subsidies), credit, more secure markets/equitable inclusion in value chains, social protection to prevent asset stripping in crisis, enforcement of the minimum wages, secure women's land rights.
- c) *Problem:* Green revolution in Africa has not worked so far and will not work in the future.
Solution: Labor mobility to urban areas – remittances to rural areas. Forget about agriculture, it will not work anyway.

In August 2009, President Jakaya Kikwete launched the new initiative *Kilimo Kwanza* (Agriculture First) that addresses all the problems listed in a-c above (Kikwete, 2009). *Kilimo Kwanza* is initiated by the private sector through *Tanzania National Business Council (TNBC)* aiming at achieving a Green Revolution in Agriculture (United Republic of Tanzania, 2009). According to President Kikwete, *Kilimo Kwanza is a national resolve to accelerate agricultural transformation. It comprises a holistic set of policy instruments and strategic interventions towards addressing the various sectorial challenges and taking advantage of numerous opportunities to modernize and commercialize agriculture in Tanzania* (Kilimo Kwanza, 2009). TNBC (2009) puts emphasis on the potential of agriculture contributing towards national wealth creation as the global conditions for producing food are conducive to high food prices and a worry that global food production will not be able to secure future food needs.

Kilimo Kwanza focuses on modernization of agriculture including both small and large scale farmers through technological and political reforms, public private partnership, value chain

approaches and foreign investments (Kilimo Kwanza, 2009; TNBC, 2009). The difference that Kilimo Kwanza is expected to make is to mobilize the whole society, in particular the private sector, for a joint effort to boost agriculture by giving it priority and by pointing out the importance of agriculture for the county's future development. As young people are running away from agriculture and poverty is increasing in number among smallholder farmers and pastoralists, there is a need to change the perception that there is no future in agriculture in Tanzania and increase the sector's self confidence and status. Currently, the Agricultural Sector Development Programme (ASDP) is the main mechanism for support to agricultural development in the country and will probably be the implementing mechanism of *Kilimo Kwanza*. Land and agriculture go hand in hand and out of ten different pillars, pillar no 5 in the implementation framework of *Kilimo Kwanza* focuses on land resources (Kilimo Kwanza, 2009). *Land* indeed plays an important role in the discussion of what kind of agricultural development and agro-investment should take place in Tanzania.

3.2. LAND RESOURCES, LAND USE AND AGRO-INVESTMENT

Tanzania's total land is 95.5 million ha where 44.0 million ha is arable and 10.1 million ha is cultivated (Statistical Year Book 2005 in TNBC, 2009). All land in Tanzania is public land vested in the President as trustee on behalf of all citizens (The Land Act, 1999). Land is categorized into a) *general land*, b) *reserved land* and c) *village land* where village land is the largest category constituting about 70% of the total land. It is estimated that public institutions such as military camps and prisons control more than 2 million ha of land suitable for agriculture which is hardly in use (TNBC, 2009). *Kilimo Kwanza's* pillar no 5 on land states that the Land Act of 1999 should be amended to facilitate equitable access to land for investments, that the capacity of District Land Officers should be strengthened, that land banks for commercial production/investments should be established, that the underutilized land suitable for agricultural investments should be identified, that villagers should be enabled to use land as equity in joint ventures with investors, that the current market value of land should be worked out, that land hoarding and speculation should be avoided and that land belonging to government institutions should be better utilized (Kilimo Kwanza, 2009).

The Land Act of 1999 is basically perceived by CSOs as an appropriate tool for protecting the rights of local people, although implementation of the law, lack of coordination among government institutions and some people acting as "being above the law" might contribute towards local people losing out on their rights to land. However, what is meant by the Kilimo Kwanza pillar no 5 stating that *the Land Act of 1999 should be amended to facilitate equitable access to land for investments* is not clear and creates a worry that the rights of local people might be under pressure. TNBC (2009) claims that land is undervalued in Tanzania, that agricultural land use management is fragmented and unable to support transformation of the agricultural sector. The Land Act of 1999 states that land should be valued according to the market value, but it is difficult to determine what the market value could be.

The food price crisis of 2007/08, the production of biofuel and uncertainty around climate change and future food production, have contributed towards a new drive for investing in

agriculture (UNCTAD, 2009). For the first time in three decades, investment in agriculture is happening and it might be profitable to invest in agriculture (ibid). This contextual change has created new optimism in relation to using the agricultural sector as engine for growth and development in countries such as Tanzania (Hella, Haug & Kamile, forthcoming). At the same, time there is a worry that smallholder farmers and pastoralists will lose out as land is being acquired or grabbed by international companies without recognizing the rights of local people, providing compensation or securing alternative employment opportunities (Cotula *et al.*, 2009; Braun & Meinzen-Dick, 2009; GRAIN, 2008). Land grab refers to *large scale land acquisition – be it purchase or lease – for agricultural production by foreign investors or ‘(trans) national commercial land transactions’ as it may include both transnational and domestic deals* (FIAN, 2010). Regarding agro-investment and land acquisition in Tanzania, these new types of land investments are taking place:

- Land for biofuel production
- Land for food production in other countries e.g. Arab countries wanting to use land in Tanzania to produce food for their own food security needs
- Land for climate change measures such as CDM and REDD.

These three new types of agro-investment (including forestry) that all require land, open up for land speculations and land grabbing that might have a negative impact on local people, although not necessarily. The impact on local people will depend upon many factors e.g., how it is being planned, managed and controlled. In addition to agro-investment in relation to land, there are also other types of agro-investment happening in Tanzania not necessarily requiring acquisition/grabbing of land, but which might also have an impact on local people’s rights and the market value of land. Below, we will assess the agro-investment initiative Southern Agriculture Growth Corridor of Tanzania (SAGCOT), but first we will look at land acquisition for large scale biofuel and food production by international investors.

3.2.1. Biofuels

For the last three to four years, large scale land acquisition or land grabbing by international investors in relation to biofuel production has been high on the international agenda. Civil society organisations and researchers have warned against this kind of neo-colonial acquisition of land. Land acquisition as an international phenomenon is not new, but what is new in this round are the scale and the government-to-government involvement. In Tanzania, more than 4 million ha of land are reported to have been requested for biofuel investment, but only 640,000 ha have been formally allocated and about 100,000 have been given legal rights of occupancy (Sulle & Nelson, 2009).

The government instigated a moratorium placing all biofuel projects on hold until guidelines for biofuel investment in Tanzania were developed. A National Biofuel Task Force (NBTF) was established in 2006 under the Ministry of Energy and Minerals. This Task Force has completed its work and the new guidelines were approved in December 2009 and printed in July 2010 for launching at the *Saba saba* fair in July 2010. However, the guidelines were not launched during the *Saba saba* trade fair nor the *Nane nane* agricultural show as expected. The Minister of Energy and Minerals is responsible for implementation of the biofuel guidelines and plans to establish a new biofuel center covering all questions in relation to biofuels, housed at Tanzania

Investment Center (TIC). The main elements of the new guidelines are that *land should not be leased out for more than 25 years with a five year prohibition period; that the land limit should be maximum 20,000 ha, that processing should be done in Tanzania; that contract farming should be encouraged and big plantations discouraged; and that Tanzanian farmers should participate e.g., through farmer associations* (Paul Kiwele personal communication, July 2010).

The volume of land being allocated and used for biofuel production appears so far to have been much less than what was expected. There might be several reasons for this slow down such as the moratorium, civil society protests, media focus on local people losing out on land deals, the financial crisis reducing fund accessibility for investment and biofuel becoming less attractive from an environmental point of view. Also, governmental officers express caution as one said *we just have to do biofuels right – if not, biofuels will cause a disaster in relation to land and food security; and another, we have good policies and good laws, but implementation is always a problem*. Apparently, local people consent and land compensation is a problem as the value of land is difficult to determine, procedures for compensation are not followed, and promises are not written into contracts and being broken (Sulle & Nelson, 2009; Kisarawe District farmers chapter 3.3.1.1.).

Village people are promised jobs, roads, schools and health services by the investors, but so far few of these promises have been put into action. Sometimes district land officers who are trusted by the local people play an active role in persuading village people to lease out their land. Since village people do not know exactly the size of their land, it is difficult to negotiate acreage and value. Village people also tend to continue to perceive that they still have the right to land after it has been leased out to investors – they regard the land deal more as a partnership than a loss of access to their land. Some of the investors have just disappeared and employees have not received pay for several months (Key informants; Kisarawe District farmers chapter 3.3.1.1.)

Not all biofuel activity might have a negative impact on local people's land rights. Sulle & Nelson (2009) found that biofuel companies using outgrower and other contracted smallholder arrangements have little direct negative impact on land access. According to FAO (2010), *biofuel development in Tanzania could provide an important vehicle through which to revitalize agriculture by bringing a variety of investments needed to boost productivity*. FAO recommends cassava and sunflower as suitable biofuel crops in Tanzania, underlining outgrower cassava-based biofuel industry as a possible pro-poor undertaking (FAO, 2010). FAO warns against *Jatropha* because of risks related to productivity uncertainties. CSO informants reported that *Jatropha* is being uprooted in certain places in Tanzania.

List of Companies Involved in Biofuel Development in Tanzania

Sno	Name of the Company	Shareholders	Target Area	Objectives	Land ha acquired/ requested
1.	Tanzania Technology Energy Development	Tanzanians	Dar es Salaam (Goba), Coast (Kisarawe) and Arusha (Leguruki, Engaruka) and other parts of Tanzania	Promotion and Research	
2.	SEKAB BioEnergy Tanzania	Swedish/ Tanzanians	Coast Region Bagamoyo Rufiji	Production of Bioethanol from sugarcane	22,500/24,500 0/400,000
3.	PROKON Renewable Energy Solutions and Systems Ltd.	Germans	Mpanda	Biodiesel production from Jatropha	
4.	Diligent Tanzania Ltd.	Dutch	Arusha, Manyara and Kilimanjaro	Biodiesel production from Jatropha	
5.	Bioshape Tanzania Ltd.	Dutch	Lindi (Kilwa)	Biodiesel production from Jatropha	34,000/82,000
6.	African Biofuel and Emission Reduction (Tanzania) Ltd	Americans/ Tanzanians	Kagera (Biharamulo)	Biodiesel production from Mhihi (Croton megalocarpus)	
7.	Farming for Energy, for better livelihood in Southern Africa (FELISA)	Belgians/ Tanzanians	Kigoma	Biodiesel production from oil palm	4,258/5,000
8.	J&J Group (Pty) Ltd Pretoria-South Africa.	South Africans	Tabora (Kaliua)	Biodiesel production from Jatropha	
9.	KITOMONDO Ltd	Italians/ Tanzanians	Coast (Bagamoyo, Mkuranga)	Biodiesel production from Jatropha	
10.	KIKULETWA Farm	South Africans	Moshi (Kikuletwa)	Biodiesel production from Jatropha	400
11.	EUROTECH	Koreans	Undecided	Biodiesel production	
12.	Environmental and Economic Development (EDEN)	Tanzanians	Njoluma (Wangingombe, Saja and Nyanyembe)		
13.	JKT	Tanzanians	JKT-Farms (Oljoro, Mgambo, Chita, Maramba, Mlale and Ruvu)	Production of Jatropha seeds for Biodiesel production	
14.	Sun Biofuels	UK	Coast (Kisarawe)	Jatropha production	8,211/50,000

Source: Ministry of Energy and Minerals, July 2010.

The source for Land acquired and requested (in ha) is Sulle & Nelson (2009)

3.2.1.1. Biofuel production in Kisarawe District

Kisarawe district is one of the six districts of the Coastal Region in Tanzania. According to the Socio Economic Profile by the National Bureau of Statistics (NBS) of Tanzania, Kisarawe includes four forest reserves. Being close to Dar es Salaam, the district experiences heavy deforestation, trees are cut down for domestic use and charcoal production for both urban marketing and home consumption. Villagers recently gave 8,000 ha of land to the British Sun Biofuels Company to cultivate *Jatropha* (Daily News, 15 March, 2010). Sun Biofuels Ltd is a large-scale *Jatropha* producing company situated in the district about 70 km from Dar es Salaam. The major shareholders are Sun Biofuels Plc of the UK (88%); Julian Ozanne, a Briton (10%) and Daudi Makobore and Herbert Marwa, Tanzanians 1%. Sun Biofuels Ltd planned to invest about 25.3 billion Tanzania shilling (€14.3/US\$20 million) in the project by establishing a biofuel processing plant and cultivation of *Jatropha*. The company intended to employ about 1,000 people once in full operation as it started slowly in 2009. The company also produces cassava which is being intercropped with *Jatropha*. The company requested about 20,000 ha but it was able to obtain 8-9,000 ha from 11 villages in the Kisarawe District, Mtamba, Muhaga, Marumbo, Paraka, Kidugalo, Kurui, Mtakayo, Vilabwa, Mitengwe, Mzenge 'A' and Chakaye. The biofuel project is expected to increase the income of Kisarawe inhabitants besides the normal crops of cassava, coconut, cashew nut and oranges (www.sunabiofuels.com accessed, August 2010).

Focus group discussion with selected farmers in some villages where Sun Biofuels is operating generated mixed debates. Several villagers stated that they were not compensated for their land, while others said they received too little money for their livelihoods. The villagers blamed government and district officials for misleading them.

"We were cheated. District officials told us that all other 10 villages in the district have already agreed to give the investor land and that higher authorities have already sanctioned the move," said one resident of Muhaga village.

Muhaga village gave away over 1,000 ha of land to Sun Biofuels which has since written an official letter to the village authorities, informing them that no one will be allowed to trespass the company's farm area effective March 15, 2010.

"By this letter and in order to maintain good relationship, we are giving you a three weeks' notice effective February 23, 2010. When it reaches March 15, 2010, the company will be compelled to use force to arrest and evict anyone within the area of its jurisdiction," the letter dated February 24, 2010 and signed by acting Human Resources Officer, M. Tembo, read in part.

Villagers bordering the over 8,000 ha farm, part of which is already planted with *Jatropha* and cassava, are complaining against the company's blockade saying it denies them access to water sources and a short cut to neighboring villages where their relatives live. *"If the company makes its threat good, we will suffer because we will have to go round their farm as short cuts will be closed,"* said Mtamba village chairman who, however, was yet to receive Mr Tembo's letter which his peer at Muhaga, Athumani Mkambala had a copy.

Sun Biofuels applied for 20,000 ha of land in the district but only managed to get close to 9,000 ha from 11 villages with a population of over 11,200 people, according to local officials. Initially, district officials had set the compensation mark at 800m/- after an Ardhi University expert evaluation of individual plots. Former Kisarawe District Land Officer said the money was earmarked to compensate to 2,840 households. But few days later, the Sun Biofuels Chief Executive Officer, issued a statement saying only 230m/- has so far been used to compensate the villagers, amidst complaints of unpaid villagers and those seeking fair payments for their land. The Kisarawe District Land offer has been transferred to Rufiji District Land where foreign companies are also facing allegations of land grabbing, cheating villagers and colluding with district officials to silence resistance.

From the other side, a different view is presented:

"To the best of my knowledge, the decision to give land to the investor was done properly in accordance with the law. Village assemblies were convened and people were clearly told what to expect," said the Kibuta ward counselor.

It might appear that village governments were implementing decisions already made at top levels. The national policy is to welcome investors as reminded by the President *".....Kikwete hit the nail on the head when reminded civil servants of their cardinal duty of serving investors diligently in the interest of promoting economic growth"* (Guardian, 28.06.10). Local people in Kisarawe made the following statements in relation to the Biofuels Company and land acquisition. Most of the interviewed farmers were concerned about what they perceived as unfair or total lack of compensation for their land, in particular common land, as well as promises not kept by the biofuel company:

Relationships with the biofuel company

- The biofuel company has acquired our fathers' land and many of us have not yet been compensated
- We have lost our prime land without giving our consent
- The village farm which we had access to, has been taken and no compensation has been given
- One of the leaders who were involved in the negotiating team of giving land to the investor said he had no land that was acquired by the investor.

Experience with land acquisition

- All farmers complained that they did not know the process and procedure of land acquisition
- They did not know the biofuel company procedures either, nor the company and their own rights
- They were promised to become Jatropha outgrowers in the future – they do not know if the promise will be fulfilled
- One farmer who participated in giving out land to the investor is very upset with the way it was handled: We were inadequately informed about the procedure and the Ministry used the old Land Act to issue land instead of the new Land Act. The idea of giving out

- Some farmers said the process was bad because the surveyors and valuers colluded with the investors to underestimate the amount of land and crops to be compensated for.
- All farmers said they should have been educated about the investment before being pushed to give their land away.

Benefits/Loss because of land acquisition

- Most farmers said they have not benefited from the biofuel company: Before the acquisitions, the investors agreed to dig boreholes, build a village office, support the hospital and rent a village warehouse. But to date, nothing had been implemented
- Some households had received a meagre compensation
- They expected that the biofuel company would employ more villagers
- The loss of access to village land and the amount of land taken, jeopardizes land to be left for future generations and for poor members of the community
- Most farmers have a negative opinion about this since they have also been denied fetching firewood in the area given to the investment.
- Village leaders believe that benefits from land acquisition are many and will continue to increase as the days go by. Currently some villagers have been employed by the company on a six-month contractual basis. Leaders express that the village has lost some ground due to the fact that the promises the investor gave have not been fulfilled. In addition, the compensation was small and unfair⁵⁴. Only the perennial crops such as mangoes, coconut and cashew nut trees were compensated for. All communal land (village farm) and open access land (reserves) were not compensated for at all. The actual land taken was not communicated to the villagers. 99-year lease was wrong. Use of GPS during the survey was new to the villagers and led to more land being taken without compensation. The water catchment area was also given out, thereby denying the villagers their source of water which is crucial for their livelihoods. However, they may get support in water projects and if this is done in a fair way, people will benefit
- One farmer said that investors are not a bad idea as it may contribute to the development of the village. The challenge is the false promises given by the investing companies. For example Sun Biofuels promised to provide water, support education, support a dispensary and build a sports ground for youths. None of these promises has been fulfilled.
- Another said that agro-investment is not bad but guidelines must be issued and the villagers or communities giving out land must be made familiar with them.
- The challenge with agro-investment is the community ban on fetching firewood, obtaining timber, and preparing charcoal from communal forests which have been annexed to the *Jatropha* farm. If we had known the land law we would not have issued such a big chunk of land for 99 years to the investors.

3.2.2. Food production

In addition to biofuel, land is also being required by international investors for food production purposes such as Arab countries requiring huge areas of land for food security purposes in their

⁵⁴ The highest compensation was 9,000,000/- Tshs (About USD 6,430) for 30 acres and the minimum was 100,000/- Tshs (About USD 70) for the plants.

own countries. According to Tanzanian officials, both Arab and Indian food production investors have showed interest for leasing huge areas for food purposes. Some of these investors were taken to “prison land”, but were not all that interested in land they regarded as being too remote in relation to infrastructure and markets.

The online paper *ThisDay* reported in January 2010 (www.thisday.co.tz/?l=10573) that the *United Arab Emirates (UAE) company is seeking a 98-year lease on vast tracts of farmland in Tanzania to grow rice in order to secure food supplies for the Gulf countries. Pharos Miro Agriculture Fund, which was launched in November last year, plans to lay hands on 50,000 hectares of prime land in Tanzania this year. Gulf countries, mainly reliant on food imports, have increased efforts to buy or lease land in developing nations such as Tanzania to secure food supplies and minimize the impact of food inflation. Food prices have risen sharply over the past year, prompting government and private sector firms in the Middle East to look into ways of securing supplies, as the majority of the food in the region is imported. Miro chief executive Oliver Barnes said: “We are in the process of leasing 50,000 hectares of land in Tanzania which will be ready by the end of this year and will mainly be used for rice production.” The Tanzanian contract will be on a 98-year lease basis and includes terms under which the local community will benefit from the farm’s produce and employment opportunities will be created.*

Food prices are still high and in particular wheat prices are on the rise again, investment in food production can be expected to increase in the future. Some of the same rules that have been stated in the biofuel guidelines should also be valid for agro-investment by foreign actors into large scale food production such as the example above illustrates. A question in relation to land grabbing and food production by foreign countries to secure food supply in their own country is why trade cannot be developed in a way that makes it possible for e.g., Arab countries to purchase food from Tanzania without having to lease huge areas of Tanzanian land.

3.2.3. Climate change – Clean Development Mechanism (CDM) and Reduced Emission from Deforestation and Forest Degradation (REDD)

The third kind of new investment that might contribute towards local people losing out on their traditional land rights is climate change measures such as CDM and REDD. So far only one CDM project has been approved in Tanzania, but more are underway. The Norwegian company Green Resources AS (GRAS) has three main plantations in the Southern Highlands of Tanzania all managed by Green Resources Ltd (GRL) with 7,900 ha of forest. In total, land allocated to Green Resources in the Southern Highlands covers more than 100,000 ha in various stages of the land acquisition process, including 34,000 ha of titled land (www.greenresources.no/News/tabid/127/articleType/ArticleView/articleId/48/Developing-CDM-Projects-in-Tanzania.aspx). According to NGO representatives, Green Resources grabbed land at Mufundi that was used as graveyard. Green Resources has developed two Project Design Documents (PDDs) for CDM projects in Tanzania. To get CDM approval is a complicated process that needs resourceful actors to succeed. When it comes to carbon trading, the voluntary market might be a more accessible option than CDM. For example the Ministry of Finance in Norway has purchased quotas on the voluntary carbon market to fulfill the Kyoto measures. Overall, government officers find that there is a limited interest in so-called tree farming aiming at the CDM opportunity in Tanzania. The reasons given are both the complicated process in

relation to getting approval and the bureaucracy in Tanzania. Investors can go other places and acquire land e.g., in Sudan in an easier way.

Tanzania is in the process of developing a national REDD strategy expected to be ready in 2010. Several pilot projects are just starting. The first REDD pilot project was launched by the Tanzania Forest Conservation Group in August 2009, aiming at reducing emissions from deforestation in ways that provide direct and equitable incentives to communities to conserve and manage forests sustainably (Tanzania National REDD-Readiness programme, undated). The idea behind the seven REDD pilot projects funded by Norway, is that community based REDD should be developed from a participatory forest management philosophy. A performance based REDD fund as well as access to the voluntary carbon market, are expected to yield income to the organized local pilot communities after 3-4 years. Different NGOs are contracted to undertake the pilot projects linking local communities to the growing carbon market and the REDD fund. To what degree REDD will be a success is outside the scope of this paper. The reason why it is included is that REDD projects may have an impact on land regarding the possibility of more land being converted into environmental conservation kind of protected areas at the expense of crop land as well as land being privatized for achieving carbon payment. However, key informants such as CSO representatives and researchers, were quite optimistic regarding REDD projects not impacting negatively on local people, but rather the opposite, providing opportunities that might be beneficial. The Norwegian REDD support is currently under so-called *real time evaluation* which might give more knowledge on possible impact on land and local people's livelihoods.

3.3. AGRO-INVESTMENT - GROWTH CORRIDORS

There are many ways to invest in agriculture. Lately, land grabbing and biofuel production have received negative attention *for investing in ways that threaten* local people's livelihoods. There are other ways to invest in agriculture that do not necessarily involve privatisation of large areas of land through land acquisition e.g., certain types of contract farming. Smallholders in Tanzania have for some time been involved in outgrower schemes by producing palm oil, sugar cane and sunflowers which they sell to processing companies such as in Kigoma and Kilombero valley (Sulle & Nelson, 2009). Other ways of investing in agriculture is for example through the so-called *growth and development corridor approach* which might also include different contract farming models. The idea behind the growth corridor approach is that economies of scale and patient capital are needed to finance agriculture-supporting infrastructure (Palmer, 2010). In short, the corridor approach includes a geographically focused investment including value chain thinking, small holder and commercial agriculture, public-private partnership and government/donor funding.



Map 2: The proposed Southern Agriculture Growth Corridor of Tanzania or TAZARA Corridor (SAGCOT)

Tanzania is planning to launch the *Southern Agriculture Growth Corridor* (SAGCOT) also called the *Tazara Corridor* similar to the *Beira corridor* as described in the chapter on Mozambique. This corridor project is still under development, but several elements are starting to fall in place and funding options are evolving e.g. from IFAD as stated by IFAD’s president Dr Kanayo Nwanze in the Tanzania Daily News, 6 May 2010:

President Jakaya Kikwete said in Dar es Salaam that the government and the private sector are on the drawing board for the ambitious projects whose costs are yet to be known. Mr Kikwete who was addressing local and foreign media attending the 20th edition of World Economic Forum (WEF) on Africa Conference which begun today, said the corridor which runs between Rukwa region through Mbeya, Iringa, Ruvuma and Morogoro has huge potential to feed the country if necessary investment was made. “This area has huge agriculture potential and we want to partner with the private sector to invest in this area heavily,” said President Kikwete who was accompanied by International Fund for Agriculture Development (IFAD), President Dr Kanayo Nwanze, said. Reiterating his government’s commitment to work with the private sector in reviving the country’s major employment sector, the president said a joint project team was likely to be formed by the two sides in August. Agriculture contributes about 45 per cent to Tanzania’s gross domestic product, while employing over 70 per cent of the population, is dominated by smallholder subsistence farmers who lack capital, expertise and technology. Mr Kikwete decried over-reliance on rain fed farming. He also said only 10.5 million hectares of arable land is under cultivation out of over 44 million hectares. The president said while supporting smallholder subsistence farmers grow, his government has now decided to work with the private sector in large scale farming and Tazara corridor was the starting point. “When we

come to Davos next year, we will have the projects in progress,” he said. IFAD President Dr Nwanze said his institution and African Development Fund would provide over 160 million US dollars to help assist the country’s agricultural sector. Dr Nwanze said most rural farmers were not making enough money from their produce, which was on high demand globally because of poor infrastructure and lack of market information (Tanzania Daily News, 6 May 2010).

The Norwegian fertilizer company Yara is also involved in the agricultural growth corridor initiative. An MOU was signed between the Norwegian Ministry of Foreign Affairs and Yara Int. to work together in promoting the green revolution in Africa where Yara’s role is to promote the agricultural growth initiative and to build the Dar es Salaam port warehouse (Masagasi & Skaara, 2009). According to Sean de Clean, Vice President Global Business Development & Public Affairs, Yara is willing to invest 60 million dollars in improving the harbour facilities in Beira and Dar es Salaam in order to increase handling efficiency (Sean de Clean, Yara, Aftenposten 04.09.09). Later Yara decided to give priority to investment in the Tanzanian port and to reduce the invested amount to 15-30 million dollars. Yara has been granted a plot at the harbor in Dar es Salaam, 99-year lease, where they will invest in storage facilities, which is expected to be ready in 2011. The idea is to blend, pack and wholesale fertilizer (50, 25 and 1 kg bags) to retailers in the country. The volume of the fertilizer market in Tanzania is limited, but expected to increase. At present, the Yara proportion of fertilizer consumption in Tanzania is about one third. The fertilizer subsidy programme is expected to contribute towards increased demand for fertilizer as well as the agricultural growth corridors, Kilimo Kwanza, AGRA and other types of agro-investments. Fertilizers account for 1.9% of the import to Tanzania while oil accounts for 22.9% (Minister of Finance, June 2010). It is estimated that about 50-60% of Tanzanian farmers never buy fertilizer and the overall fertilizer use is about 9 kg nutrients/ha (Vedeld & Kengera, 2006).

Yara defines its role in relation to involvement in the growth corridor initiative as catalytic in bringing together actors involved in the whole value chain and putting specific plans on the President’s table on implementing Kilimo Kwanza. The investment in Africa is perceived as long-term, related to social cooperative responsibility and not necessarily dependent upon development of the growth corridors. In order for Yara to succeed in Tanzania, it states that it needs to link up with the national and local private sector and again see itself as catalytic in its collaboration with the Agricultural Council of Tanzania (ACT) and the Tanzania Agricultural Partnership (TAP). The Tanzanian government wanted public private partnership with a major international fertilizer company to reduce fertilizer speculation and monopolistic positions, increase competition in order to keep prices down, make port handling more efficient, and improve fertilizer supply and timing of fertilizer supply in the whole country. If Yara can assist in making cheap fertilizer available at the right time in the whole country for farmers who choose to use fertilizer, and who can afford fertilizer and profit from using fertilizer (e.g. as an element in conservation farming or micro-fertilizer approaches), this could be a win-win situation that will benefit agricultural development in Tanzania including smallholder farmers.

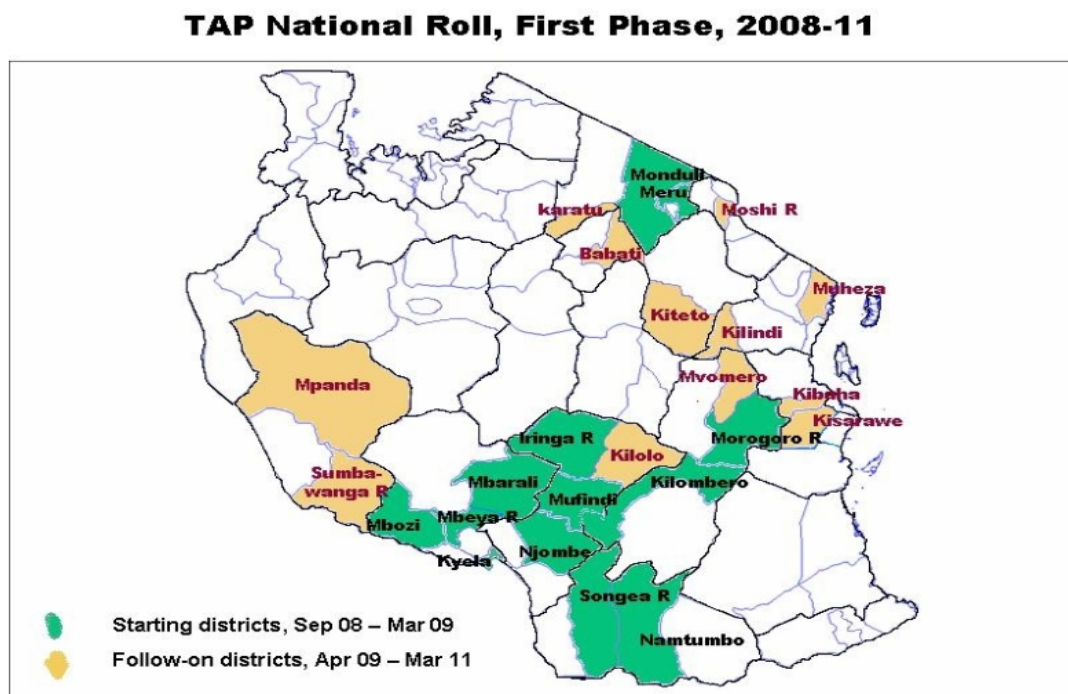
One element of the corridor approach is the fertilizer subsidy programme in Tanzania which is designed after the Malawi model. The idea is to empower the farmers through a voucher system where the vouchers are distributed directly to farmers. Each farmer who is found eligible for

vouchers receives two 50 kg bags of fertilizer for half the price and one bag of seed sufficient for one acre. The vouchers are distributed by regional, district and village voucher committees. A village voucher committee consists of three men and three women members. The vouchers are targeted to farmers with less than two acres, and who are trusted model farmers with leadership qualities. Another criterion is that female-headed and child-headed households should be prioritized for about half of the vouchers. Last year, about 730, 000 families in 40 districts received vouchers, this year about 1.5 million families in 64 districts and next year 2 million families in 80 out of a total of 120 districts will get vouchers. A farmer can only receive vouchers three times. It is a small programme – meant more as a large demonstration scheme. Input shops have been established locally, linking farmers with the fertilizer suppliers. The agro dealers running these input shops receive training and credit to start their business. The new subsidy programme has not yet been evaluated, hence, the impact is still not known.

Another element of the growth corridor approach is the warehouses and their receipt system. The Tanzania warehouse licensing board started licensing warehouses in 2007 on the basis that quality is critical for buyers and finances critical for imputers (those depositing their crop yield in the warehouse). So far, 42 warehouses have been licensed and about 100 are still remaining. Farmers and private companies deposit their crop in the warehouses. Warehouse receipts which prove to the holder that crop is deposited in the warehouse, act as collateral for loans. Presently, two banks give credit based on warehouse receipts. The idea behind the warehouses is to improve farmers' access to credit as well as to increase the negotiation power of the producers versus the traders. Maize (from 2011), rice, simsim, sunflower, cashew, coffee, and cotton are included in the warehouses. The crop will be stored and sold when prices are favorable. A problem is that it is difficult for the warehouses to take in small amounts and still give farmers a good price. Also the quality of smallholders' crops is mixed. Farmer gate prices are low and making farming more profitable is indeed a challenge. The warehouses have to take overhead to cover running costs as well as biological and man-made shrinkage.

Preliminary analysis through discussions with key stakeholders especially, civil servants, TAP staff in Dar and representatives at Morogoro are optimistic to the corridor idea. However, at the farmer level it was not easy to make a conclusion on the degree of benefits to smallholder farmers within the near future. Prospects are high although some are pessimistic since the achievement of the corridor approach depends on commitments of many stakeholders, some of whom might not be sufficiently committed.

3.3.1. Tanzania Agricultural Partnership (TAP)



Map 3: Target areas TAP (Masagasi & Skaara, 2009).

The secretariat of the growth corridor initiative, SAGCOT, is the Tanzania Agricultural Partnership (TAP). TAP is currently under the Agricultural Council of Tanzania (ACT), but is in the process of becoming an independent non-governmental organisation (NGO).

According to the ACT webpage (http://www.actanzania.org/index.php?option=com_content&task=view&id=61&Itemid=72 TAP) *TAP aims to improve effective use of agricultural inputs throughout the so called value chain. A value chain approach ensures that a whole range of inter-connected problems are addressed instead of just one problem. TAP aims at implementing a program to make agricultural inputs affordable and accessible to all income groups in Tanzania*• Stimulate profitable agricultural production• Reduce risks and stimulate strong private investment• Facilitate improved output market linkages• Reduce rural poverty.

TAP is a coordination mechanism that essentially works by helping other organizations to do their job better and more effectively (Masagasi & Skaara, 2009). Presently, about 50 organizations have joined TAP's public-private partnership approach. TAP plays an important role in fast tracking the farm input subsidy programme and in bringing the private sector on board. TAP's role in relation to the voucher-based input subsidy scheme is to provide monitoring and evaluation feedback to the government. In addition, TAP is involved in Market Information Service implemented by market partners (TAP, 2009) and the Agricultural Input Financing Initiative (AIFI) led by NMB giving loans to agro-dealers (certified retailers) (TAP, 2009). TAP will take the lead in developing the growth whilst SAGCOT is the secretariat for the initiative. The Ministry of Agriculture, Food Security and Cooperatives supports TAP and regards TAP

different from ACT since the latter is more an advocacy group for the private sector. TAP has an important role to play in relation to the Agricultural Sector Development Programme (ASDP).

3.4. AGRO-INVESTMENT, LAND AND LIVELIHOODS

The challenge for Tanzania is to go beyond national food security and use the potential embedded in agriculture to contribute towards poverty reduction, growth and development without compromising food security or the rights of smallholders and pastoralists. Land is a resource that according to the Tanzanian government and National Business Council is largely underutilized at the same time as interested international land investors are knocking on the door.

3.4.1. Land

Land, for very good reasons, is indeed a sensitive issue in Tanzania as so many people are totally dependent upon access to land for survival. According to the Tanzania Investment Centre (TIC), the country has over 33 million ha of uncultivated, arable land, but uncultivated land doesn't mean unused. The policy of the government is to warmly welcome investors to the country and to facilitate land acquisition and agro-investment in different ways. The rationale behind this policy is given amongst others in Klimo Kwanza – the drive for making agriculture more competitive and contribute towards wealth creation as well as poverty reduction. The plan is to make a land data bank managed by TIC for land over 10.000 ha where investors can find suitable land for their interests and investment ability. Land use plans for every investment is a requirement, and the investor has to pay for such a plan if it is not already available. The main question is to what degree this kind of land investment is a wise way of boosting agriculture in the country. So far, the experience with the land investors appears to be rather disappointing from an agro-investment point of view – merely broken promises and violation of the rights of local people. However, people participating in this study still think that Tanzania should not be closed for agro-investors involved in land acquisition. What was underlined by the informants was the need for a land management plan; implementation and monitoring capacity; fair compensation and benefit-sharing; speculation control; and training and awareness raising in order to ensure that the country, in particular local people, would benefit from the investment. Below follows some statements from key informants:

- a. Lack of an overall land management plan.* Allocation of land so far has been too rushed. The government was not sufficiently prepared for managing large-scale land acquisition. It is too late to make plans after land has been allocated or grabbed.
- b. Implementation and monitoring in relation to land issues.* Having laws, policies and (biofuel) guidelines is one thing – implementation and lack of monitoring capacity is something else.
- c. Principles for people to benefit from agro-investment* should be developed. For example contract farming could work – depending on how it is managed.
- d. Lack of coordination.* Many ministries and several administrative levels are involved in land questions. For example, The Land Commission and Urban Development is not

sufficiently coordinated with the Ministry of Agriculture, Food Security and Cooperatives nor with the Ministry of Minerals and Natural Resources. The Land Commission only acts on land issues if the district authority request action.

- e. *Land speculation.* Land speculation is against the law but happens nevertheless, as one informant pointed out *Local elites rush for village land*. Speculations appear to happen both by national and international actors.
- f. *Awareness and training are needed at the local level.* One informant stated that village people ask to negotiate directly with investors (not go through district authorities) to make sure they get good deals. CSOs are involved in training and awareness-raising in relation to land issues and the rights of local people.

Globally, there is a discussion going on to what degree it is at all possible to make principles that will allow for the control of large land acquiring companies and make sure local people will benefit from this kind of activity. What is regarded as the World Bank's new principles for land acquisition has caused CSOs to offer the above response statement (La via Campesina, FIAN, Land Research Action Network & GRAIN, and 22 April 2010): *Land grabbing must be immediately stopped. The WB's principles attempt to create the illusion that land grabbing can proceed without disastrous consequences to peoples, communities, eco-systems and the climate. This illusion is false and misleading. Farmer's and indigenous peoples organisations, social movements and civil society groups largely agree that what we need instead is to:*

- *Keep land in the hands of local communities and implement genuine agrarian reform in order to ensure equitable access to land and natural resources.*
- *Heavily support agro-ecological peasant, smallhold farming, fishing and pastoralism, including participatory research and training programmes so that small-scale food providers can produce ample, healthy and safe food for everybody.*
- *Overhaul farm and trade policies to embrace food sovereignty and support local and regional markets that people can participate in and benefit from.*
- *Promote community-oriented food and farming systems hinged on local people's control over land, water and biodiversity. Enforce strict mandatory regulations that curb the access of corporations and other powerful actors (state and private) to agricultural, coastal and grazing lands, forests, and wetlands.*

3.4.2. Livelihoods

Tanzania is in dire need of employment and income opportunities for its people. Job creation is indeed one of the drivers behind the policy of welcoming agro-investors to the country such as international companies acquiring or grabbing land. The Minister of Finance (2010) reported that 30% of tour guides have lost their employment by the end of 2009 due to the financial crisis and that employment in horticulture dropped by 15% that year. Agriculture and natural resources are very important for income and jobs. But there are many other ways of investing in agriculture that do not necessarily involve land acquisition or land grabbing – ways that could increase income from agriculture and improve the livelihoods of smallholder men and women farmers. Biofuel producing companies have promised employment, but have so far not delivered according to expectations. Experience from plantations in Tanzania is that the salary level is low;

as one informant stated: *Working on a plantation is basically a waste of time as you earn close to nothing.*

Currently there are only about 500,000 tax payers in Tanzania with a population of about 40 million people and 30-40% of the state budget comes from donors (Swahili street, November 28, 2009). In spite of the trend of young people leaving the rural areas and moving away from farming, the Ministry of Agriculture, Food Security and Cooperatives estimates that about half of the young people will remain in farming. Future farmers will be secondary school leavers with more skills than before and a greater interest in farming as a business-like source of income, not only farming for food security purposes. To create opportunities for this group of young farmers will be of crucial importance for the future employment situation in the country including the urban labor market.

Kilimo Kwanza in combination with external factors is contributing towards a new optimistic drive in Tanzanian agriculture. High global food prices, opportunities in relation to climate change and the international community giving priority to food and agriculture are motivating factors for different actors involved in agriculture. However, the reception of Kilimo Kwanza is somewhat mixed. Some informants and written sources are indeed positive, believing that Kilimo Kwanza will contribute to the necessary changes paving the way for a more successful development of the agricultural sector. While others say Kilimo Kwanza is more like propaganda, that nothing new will happen and that there is an underlying structural problem of lack of trust in the country. They also point to the involvement of business elites with a somewhat shaky record of corruption charges and in general risks in relation to institutional failure and corruption.

Kilimo Kwanza has initiated a discussion on what kind of agriculture Tanzania should go for. Some people claim that Kilimo Kwanza will favour commercial farming and the views differ to what degree this is a good strategy. However, the President in the launching of Kilimo Kwanza on 3 August 2009 underlined that the focus was on the whole spectrum of small, medium and large scale farmers (Kikwete, 2009). Both Kilimo Kwanza and the Southern Agriculture Growth Corridor of Tanzania Initiative are criticized for focusing on the big, resourceful farmers, those who can afford to buy fertilizer and rent tractors. The criticism also includes the perception that large, commercial farming is needed to contribute to the development of smallholder agriculture. There are, however, relevant examples in the world of small scale farmers producing enough food both for national food security purposes and earning export income as Binswanger (2010) underlined in relation to a Kilimo Kwanza seminar: *...small scale farmers are feeding over 1.3 billion people in the world's most populous nation, China. "There are no large scale farmers in China, small scale farmers have made the country the world's second largest horticultural producer ... delivering a key note paper on Kilimo Kwanza: Promoting Agriculture for Economic Transformation in Tanzania. Countries such as Vietnam, the world's largest rice exporter, are also largely dominated by small scale farmers.* (Tanzania Daily News, 22 March 2010).

The Ministry of Agriculture, Food Security and Cooperatives also reiterates the Kilimo Kwanza policy of promoting smallholder farming for food and livelihood security reasons, but at the

same time allowing investors and commercial farming to evolve. It is yet too early to assess to what degree and how Kilimo Kwanza will be implemented regarding smallholder versus commercial farming. Corta & Price (2009: 6) state that Kilimo Kwanza is a step in the right direction, but it will only work if it is made decidedly more pro-poor rather than focused on large farms, large technology such as tractors, and based on the assumption that the private sector will fill gaps in the support vacuum. Palmer (2010) argues in the growth corridor approach that there is a need for commercial investors to aid smallholder farming into a dynamic process of commercial agricultural development through contract farming (outgrower schemes or farm blocks models). To what degree SAGCOT will evolve according to Palmer's philosophy of the need for commercial farming, is not possible to assess at the time being as the initiative is still in a very early phase. On the one hand contract farming arrangements might create new opportunities which enable smallholders to keep their land and avoid land grab types of agro-investment. On the other hand, how the contract farming is organized and managed will determine the impact on smallholders' income and livelihoods.

There are many challenges in relation to boosting agricultural development in Tanzania where *lack of incentives to produce* appears to be an important one. Farming is not profitable in Tanzania – neither smallholder nor large-scale farmers earn enough from their produce to be motivated to increase production. For the large scale farmers both national marketing and exports constrain profitability, including e.g. different kinds of taxes such as export taxes, internal and external export bans, the bureaucracy in order to obtain export permits etc. For the smallholders both production volume and farmer gate prices are low due to many different reasons. The value chain approach that TAP is promoting, including amongst others marketing assistance, price information, warehouse receipt system, extension and training, subsidized fertilizer, mechanisation/local tractor hire, local input shops etc, is expected to turn the situation around and assist smallholders in increasing their income from agricultural production. This is a kind of agro-investment that that might be much more successful than large land acquisition projects regarding job creation, income improvements, poverty reduction and economic development.

It is too early to assess to what degree TAP and similar value chain service provision efforts will be able to achieve the expected results, but it appears promising. If this kind of agro-investment was successful, Arab and other countries could use *trade* instead of land acquisition as a tool to secure their future national food supplies. Since market access is indeed a constraint for Tanzanian and many other African farmers, a secure contract of delivering a certain volume of food to e.g. Arab countries could also reduce today's market access problem.

4. SUMMARY AND CONCLUSION

The purpose of the study is to assess different approaches to agro-investment in Mozambique and Tanzania in order to learn lessons on how agro-investment might impact on land and livelihoods in the two countries. The case studies presented in the report, when dealing with the objectives delineated in the Introduction, reveal both similarities and differences between Tanzania and Mozambique in relation to the study objectives.

In Mozambique, the Beira Agricultural Growth Corridor (BAGC) brings up the following questions:

- Who has which interests in land in the targeted area? A more comprehensive overview with cadastral information on this issue is needed. The report describes some of the key actors in the field and how their roles and interests are related and articulated.
- The BAGC concept delineates two main models of contract farming to be implemented to develop commercial farming in the area. The report discusses these models and recommends the establishment of a local Think-Tank Forum where main partners, including local smallholders, are represented for monitoring and research on best practices in integrating smallholders into commercial farming initiatives.
- Two main agencies working with land issues at the national level are also represented in Chimoio, Manica: ORAM *Organização Rural para Ajuda Mutua* and iTC *Iniciativa de Terras Comunitárias*. Together, these agencies represent considerable experience in working with local community organisations and negotiation processes, and can represent some aspects of local smallholders' interests in relation to BAGC and in the suggested Forum.
- If less land than initially expected (in the BAGC concept assessment) is in practice available for commercial-agriculture investments in the region, this may provide an argument for allocating new resources to work with the formalisation of local people's land rights, as recognised in the 1997 Land Law. Competing land claims often arise as a result of the increasing value of land. Furthermore, it can be argued that potential conflicts over boundaries can more easily be avoided through proper delimitation processes. In Mozambique this involves the *participation* of local community representatives and community *consultations* as set out in the Regulations and Annexes to the Land Law. In fact, the allocation of resources to local land delimitation processes in the first phase of the BAGC initiative can, over time, secure a broader, more solid, and locally more legitimate *land base* for agro-investments and commercial farms, and serve to avoid future conflicts over land.
- There may be a significant difference between *block-farming* and *outgrower schemes*, as defined in the BAGC concept property relations to land. While outgrowers are supposed to farm their own land, serviced farm blocks are supposed to be leased by the farmers.
- It should be expected that the choice and implementation of linkages between commercial-farming units and local smallholders would be flexible and adaptable. Relevant questions in this regard will, however, be: On what basis (information, experience) are choices made, relevant factors and interests taken into account, models adapted to local conditions and/or replaced by other arrangements? (How) can local smallholders contribute constructively to or influence this type of decisions and processes?

Points to be taken into account in the further development of the BAGC approach are:

- Regional history points towards legacies that still have considerable impact but at the same time need to be overcome in order for a neo-liberal political framework to provide a facilitating environment for agricultural development, investments and growth – a facilitating environment which at the same time puts smallholder farmers to the fore. These historical legacies include: traditions of a highly centralised and/or coercive state; unclear/mixed principles of public-private roles and responsibilities; and weak relations of top-down accountability.
- It is a challenge to avoid building a structure of ‘isolated islands’ of modern agriculture, which characterised colonial plantation agriculture, and rather seek to develop an integrated approach and create sustainable local synergies.
- What can be of particular interest with regard to the “failed Manica miracle” in the BAGC context is the potential for analysis of experienced bottle-necks, and the sharing of experience-based knowledge. New initiatives developed by some of the few remaining Zimbabwean farmers in Manica Province have also been identified in the BAGC concept as projects targeted for a first phase of pilot project opportunities (BAGC 2010:28-31).
- A next step in the development of the BAGC initiative is, according to plans, to establish a BAGC Secretariat in Beira, which is not only the port but also the capital of Sofala Province. The local/regional business association ACIS – *Associação de Comércio e Indústria* has been identified as a host/ institutional platform to play a key role in the further planning, implementation and monitoring of the activities; a role which is expected to develop into a (separate and more independent) BAGC Secretariat. ACIS is, in fact, a business association with a high degree of legitimacy and excellent reputation in the Corridor area. It is membership-based and basically funded through membership fees. In the further development of BAGC, including a secretariat, it seems important to delineate a role for ACIS which does not jeopardise its present role and functioning as a recognised independent member organisation.
- The BAGC partnership brings up a more general question concerning **accountability in public-private partnerships**. What models of accountability apply, and who is accountable for what? To whom? Private companies are accountable to their boards, primarily for the *results* line in their accounts. When a PPP initiates an initiative to promote development of commercial agriculture in a fairly high-risk environment, the *partnership* as such can/will hardly be accountable. Then maybe it is the public partners in PPPs who have to assume the roles that actually involve accountability?

The Tanzanian case study did not go in depth in assessing different aspects of the agricultural growth corridor initiative as was done for Mozambique. However, many of the findings, questions and recommendations made in relation to BAGC are also of crucial importance in relation to the Southern Agriculture Growth Corridor of Tanzania (SAGCOT) in particular in relation to the choice of models and type of farming, relationship among actors, participation of local communities, sustainable local synergies, land rights and land policy, principles of public-private roles and responsibilities, and accountability in public-private partnerships. The growth corridor initiatives might work well as a way of investing in agriculture and promoting large farms, but if the aim is also to reduce rural poverty and improve smallholders’ livelihoods special measures need to be in place to ensure a pro-poor approach. It is important to include job creation as an element in the

growth corridor approach in the sense that smallholder farming is regarded as a job where one can earn a decent income. The agricultural policy in Tanzania needs to change such that it establishes better incentives for farmers to produce. As long as neither smallholders nor large-scale farmers perceive production as being profitable, any kind of agricultural support programme will have difficulties succeeding, including the growth corridor approach and TAP. The new boost given to Tanzanian agriculture through Kilimo Kwanza is a golden opportunity to turn policies around and do away with the underlying structural problem of lack of trust that constrains farmers from responding to governmental initiatives thinking it would work.

How to invest in agriculture in a way that contributes towards poverty reduction, growth and development without compromising food security or the rights of smallholders and pastoralists is indeed a challenge for the Tanzanian government. International agro-investing companies are requesting large areas of land, and land has been or is in the process of being allocated to such companies. The policy of the government is to warmly welcome such investors (also called land grabbers) into the country. So far, the experience with land acquisition companies appears to be rather disappointing from an “agro-investment in land could lead to development” point of view – merely broken promises and violation of the rights of local people. However, people participating in this study still think that Tanzania should not be closed for agro-investors involving semi-large land acquisition. But land acquisition as agro-investment should only take place on certain conditions such as: according to a national land management policy and plan, implementation and monitoring capacity should be in place; fair compensation and benefit-sharing for local people must be ensured; better control in relation to land speculation by national elites as well as international actors; and training and awareness-raising in order to ensure that the country, in particular local people, would benefit from the investment. To what degree it is an illusion that international agro-investors requiring or grabbing land can be governed by principles where the follow-up is left to developing country governments and institutions is still to be seen.

5. REFERENCES

- Abrahamsson, H. and A. Nilsson (1995) *Mozambique: The Troubled Transition: From Social Construction to Free market Capitalism*. London: Zed Books.
- BAGC Report (2010) *Beira Agricultural Growth Corridor: Delivering the Potential*. Report launched in January 2010. Elaborated by InfraCo, AgDevCo.
- Braun von J and Meinzen-Dick, R. (2009) “Land Grabbing” by Foreign Investors in Developing Countries: Risks and Opportunities. IFPRI Policy Brief 13.
- Calengo (2009) *Iniciativa de Terras Comunitárias (iTC): Estudo sobre o Processo das Delimitações de Terras Comunitárias em Cabo-Delgado, Manica e Gaza*. Elaborado por André Jaime Calengo Consultoria E.I., Maputo, Feb. 2009.
- Chilundo, A. (2004) Strengthening and streamlining the community land demarcation process. Paper presented at a conference on *Land in Africa: Market Asset or Livelihood Security*. IIED, London, November 8-9, 2004.
- Clean de, S, (2009) Bygger vekstkorridorer. Sustainable food production in Africa. YARA-bilag. Oslo: Aftenposten 04.09.09.
- Corta da L. & L. Price (2009) Poverty and growth in remote villages in Tanzania (2004-2008): Insight from village voices film research. UK: Chronic Poverty Research Center. Working paper No 153.
- Cotula, L., Vermeulen, S., Leonard, R. and Keeley, J., (2009) Land Grab or Development Opportunity? Agricultural Investment and International Land Deals in Africa, IIED/FAO/IFAD, London/Rome.
- Ellis, F. & S. Biggs (2001) Evolving Themes in Rural Development 1950s-2000s. *Development Policy Review* 19(4):437-448.
- Fan, S. (2010) Business as Unusual. Halving Hunger: Meeting the first millennium development goal. Washington DC: International Food Policy Research Institute. Food Policy Report.
- FAO (2010) Bioenergy and food security. The BFS Analysis for Tanzania. Environment and natural resources management working paper 35. Rome: FAO.

FIAN (2010) Land grabbing in Kenya and Mozambique. A report on two research missions and human rights analysis of land grabbing. Germany: FIAN International Secretariat.

Guardian (2010). Kikwete's reminder on investors timely. Leader, 28.06.10.

GRAIN (2008) Making a killing from hunger. www.grain.org/articles/?id=39. Accessed 8.12.08.

Hammar, A. & G. Rodgers (2008) Introduction: Notes on political economies of displacement in southern Africa. *Journal of Contemporary African Studies* 26(4):355-370.

Hammar, A. (2010) Ambivalent Mobilities: Zimbabwean Commercial Farmers in Mozambique. *Journal of Southern African Studies* 36(2), Special issue on Zimbabwe crisis.

Hanlon, J. & T. Smart (2008) O Milagre de Manico acabou. In: *Há Mais Bicicletas – mas há Desenvolvimento?* Maputo: Missanga/ CIEDIMA, pp. 71-88.

Haug, R., T. Worku, T. Lemma, T. Berg, A.R. Phiri, J.W. Banda, E.E. Kaunda, J.P. Hella, I. Kamile, C-E. Schulz (2009) High global food prices - Crisis or opportunity for smallholder farmers in Ethiopia, Malawi and Tanzania. Noragric Report No 50. Norwegian University of Life Sciences.

Hella, J.P., R. Haug & I.M.Kamile (forthcoming). Global food prices - Crisis or opportunity for smallholder farmers in Tanzania. *Development in Practice*.

Hella, J.P., A.K. Kashuliza & C. Polton. 2007. Dynamics of Liberalized Maize Marketing in Remote Areas of Tanzania: Evidences from Ludewa and Sumbawanga districts. Proceedings of AGREST annual workshop, Dodoma, Tanzania.

IDMC (2008) The Many Faces of Displacement: IDPs in Zimbabwe. Internal Displacement Monitoring Centre, August 2008, Geneva, available at: <http://www.internal-displacement.org> [accessed 5 Febr 2010].

Ikdahl, I. , A. Hellum, R. Kaarhus & T.A. Benjaminsen (2005) *Human rights, formalisation and women's land rights in southern and eastern Africa*. Noragric Report No. 26, Noragric.

Kikwete, J.M. (2009) Launching of Kilimo Kwanza by the President. 3 August. Dodoma.

Kilimo Kwanza (Agriculture First) 2009. www.tnbctz.com/index2.php?option=com_docman. Accessed 13.10.

Masagasi, S & A. Skaara (2009). Mid term review of a public private partnership programme under the Agricultural Council of Tanzania. Dar es Salaam and Oslo: Norad report.

Minister of Finance (2010) Speech by the Minister for Finance and Economic Affairs, Hon. Mustafa Haidi Mkulo (MP.) presenting the economic survey for 2009 and the medium term outlook for 2010/11-2012/13 to the National Assembly. 10 June. Dar es salaam Government printer.

Ministry of Agriculture Food Security and Cooperatives. 2008. Agricultural Sector Review and public expenditures 2008/09. United Republic of Tanzania. Dar es Salaam.

Ministry of Agriculture Food Security and Cooperatives & FAO. 2008. Agricultural sector reforms in Tanzania. Perspectives from within. United Republic of Tanzania. Dar es Salaam.

Norwegian University of Life Sciences. http://www.umb.no/statisk/noragric/publications/-reports/2005_nor_rep_26.pdf.

Newitt, M. (1995) *A History of Mozambique*. London: Hurst & Company.

Palmer, K. (2010) *Agricultural growth and poverty reduction in Africa: the case for patient capital*. AgDevCo, March 2010. http://www.agdevco.com/images/stories/pdf/GENERAL-REPORTS/the_case_for_patient_capital.pdf [accessed April 8, 2010].

Pitcher, M.A. (2002) *Transforming Mozambique: The Politics of Privatization, 1975–2000*. Cambridge: Cambridge University Press.

Sjaastad, E., R. Kaarhus, P. Vedeld & B.K. Wold (2007) *Privatisation and Liberalisation in the Agricultural Sector: An Examination of Processes and Outcomes in Three African Cases*. Noragric Report No. 39, Noragric, Norwegian University of Life Sciences.

Sulle, E. & F. Nelson (2009) *Biofuels, land access and rural livelihoods in Tanzania*. London: IIED.

Tanner, C. (2001) *Report on a FAO workshop: Common property tenure regimes*. FAO, Department for International Development, Rural Livelihoods Department.

Tanzania National REDD-Readiness programme (undated). *Participatory Forest Management and REDD: Linkages and Design Issues*. Dar es Salaam: Divison of Environment, Vice-President's Office.

TAP (2009) Tanzania Agricultural Partnership – Summary June 2009.

www.actanzania.org/index.php?option=com_content&task=view&id=61&Itemid=72.

TNBC (2009) Kilimo Kwanza – Towards Tanzanian Green Revolution. Dar es Salaam: Tanzania national Business Council.

Vedeld, P. & Z. Kengera (2006) An assessment of a public-private partnership process on developing the fertilizer chain in Tanzania. Aas: Noragric Report No 37.

Vermeulen, S. & L. Cotula (2010) *Making the most of agricultural investment: A survey of business models that provide opportunities for smallholders*. London/Rome/Bern: IIED/FAO/IFAD/SDC.

UNCTAD (2009) *World Investment Report 2009: Transnational Corporations, Agricultural Production and Development*. Geneva: United Nations Conference on Trade and Development.

United Republic of Tanzania (2009) Poverty and Human Development Report. Dar es Salaam: MKUKUTA Monitoring System, Ministry of Finance and Economic Affairs.

World Bank (2006) *Mozambique: Agricultural Development Strategy: Stimulating Smallholder Agricultural Growth*. Report No. 32416-MZ. Agriculture, Environment, and Social Development Unit, Africa Region. Washington DC: World Bank.

World Bank (2006a) *Review of Horticultural Outgrower Schemes in Mozambique*. Report No. 05-1480. Prepared by ECIAfrica Consulting Ltd and AgriDev Consult Ltd. June 2006.

<http://www.usaid.gov/mz/doc/misc/moz%20outgrowers%20report.pdf> [accessed 3 August 2010]

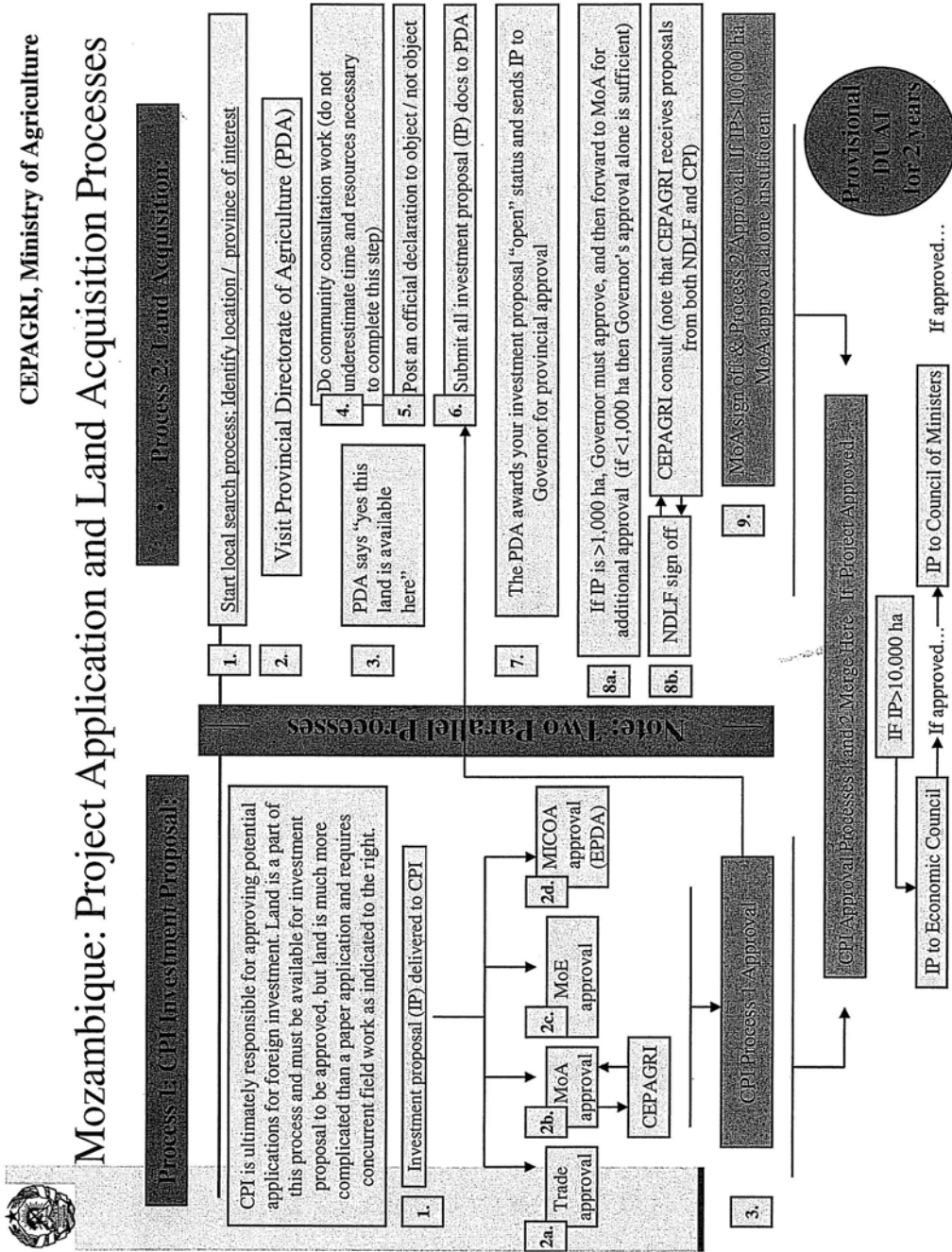
World Bank (2009) World Development Indicators, World Bank statistical database. www.worldbank.org. Accessed at 2.07.09.

World Bank (2010) *WDI Online – World Development Indicators*, <http://ddp-ext.worldbank.org/ext/DDPQQ> [accessed 15 March 2010]

Yara (2009) *Yara Finansrapport 2009: Vi gjør utfordringer om til nye muligheter*. Yara Årsrapport 2009. Oslo: Yara International ASA.

6. ANNEXES

ANNEX I: CEPAGRI: Overview of Project Application and Land Acquisition Processes



ANNEX II: LIST OF KEY INFORMANTS INTERVIEWED IN MOZAMBIQUE

1. Ms Hercilia Estrela Hamela, CEPAGRI, MINAG, Maputo.
2. Mr Graeme White, Managing Director Dalmann, President of Man. Com. ACIS, Beira
3. Ms Carrie Davies, Man. Director, ACIS, Beira
4. Mr Joaquim Langa, *Gestor Nacional*, iTC, Chimoio
5. Mr Jan de Moor, Advisor, APAC, Mozambique
6. Mr Antonio Quinze Nhamaze, Coordinator, APAC, Quelimane
7. Ms Monica Elias, Farmer, Gorogosa District
8. Mr Jorge José Batista, Farmer, Sussundenga District
9. Mr Kevin Gifford, Farmer, Manica District
10. Mr João Bettencourt, President AEM, Chimoio
11. Mr Diamantino L. Nhamossa, Executive Coordinator, UNAC, Maputo
12. Mr José Basquete, President, UCAMA, Chimoio
13. Mr David R. Munasse, Vice-president, UCAMA, Chimoio
14. Mr David and Ms Kathie Sole, Directors, Probusola, Manica District
15. Ms Carolyn Sole, Marketing Advisor, Probusola, Manica District
16. Mr André Vonk, *Sócio-gerente*, V&M Grain Co., Chimoio
17. Mr Martinus A.J. Ruijten, SNV, Beira
18. Mr Laurens van Oeyen, SNV, Maputo
19. Mr Andrew Kingman, Man. Director, Eco-MICAIA, Chimoio
20. Mr Karsten P. Nielsen, Advisor, Danish Embassy, Maputo
21. Dr José Luis Cabaço, Vice-Chancellor, Maputo
22. Mr Andrew MacLean, DFID, Maputo & London
23. Mr Emidio de Oliveira, Policy & Programme Manager, DFID Mozambique
24. Mr Eric Johnson, Senior Advisor, USAID, Mozambique
25. Mr Patric Verirssimo, World Bank Office, Maputo
26. Mr Daniel de Sousa, World Bank Office, Maputo
27. Mr Paulo Mole, Associate Director, KPMG, Maputo
28. Mr Chinguane S.M. Mabote, Coordinator and Head of SDI Unit,
Ministério dos Transportes e Comunicações
29. Mr Carlos, Costa, Director, Agrifuturo/USAID Maputo
30. Mr Carlos Moamba, E.E. Director, Agrifuturo/USAID, Maputo
31. Mr Carlos Rafa Mate, Norwegian Embassy, Maputo
32. Mr Øystein Botillen, Norwegian Embassy, Maputo

Additional information was provided by:

33. Ms Karen Lindegaard, ADIPSA, Chimoio
34. Beira Corridor Fruit and Nut Producers network
35. Mr Han Derksen, Director, AgDevCo, UK
36. Mr Chris Isaac, Director, AgDevCo, UK

ANNEX III: LIST OF KEY INFORMANTS INTERVIEWED IN DAR ES SALAAM, TANZANIA

1. Prof. Faustin Maganga- Institute of Resource Assessment (IRA), University of Dar es Salaam, Tanzania.
2. Mr. David Muhendwa, Acting Assistant Commissioner-Legal Services, Ministry of Lands, Dar es Salaam, Tanzania.
3. Mr. Mark Magilla, Coordinator, Tanzania Agricultural Partnership (TAP), Agricultural Council of Tanzania (ACT), Dar es Salaam, Tanzania.
4. Mr Jaseda – TAP contact person in Morogoro rural district
5. Mr. Bernard P. Baha, Programme Officer, HAKIARDHI (Land rights Research and Resources advocating NGO), Dar es Salaam, Tanzania.
6. Mr. Abdallah Mkindo, Program Manager, Environment and Human Rights and Gender Advocating NGO (ENVIROCARE), Dar es Salaam, Tanzania.
7. Mr. Kabenga Kaisi, Investment Promotion Officer, Tanzania Investment Centre (TIC), Dar es Salaam, Tanzania.
8. Mr. Aveline Mungumsaidie, Finance and Administrative Manager, YARA Tanzania Limited (CHAPAMELI FERTILIZERS), Nyerere Road, Dar es Salaam, Tanzania.
9. Mr. Geoffrey Kirenga, Acting Director of Crop Development (DRD), Ministry of Agriculture, Food Security and Cooperatives, Dar es Salaam, Tanzania.
10. Dr. H. Sosovele, Senior Lecturer, Institute of Resource Assessment (IRA), University of Dar es Salaam, Tanzania.
11. Mr. Paul M. Kiwele, Principal Forest Officer who was an Acting Assistant Commissioner, Ministry of Energy and Minerals, Dar es Salaam, Tanzania.
12. Mr. Fidelis J. Temu, Warehousing Regulation Manager, Tanzania Warehousing Licensing Board, Ministry of Industry, Trade and Marketing, Dar es Salaam, Tanzania.
13. Mr Ivar Jørgensen, Counselor, Royal Norwegian Embassy, Dar es Salaam, Tanzania.
14. Mr Simon Milledge, Consultant, Royal Norwegian Embassy, Dar es Salaam, Tanzania.

Additional information was provided by:

15. Several academic staff from Sokoine Agricultural University (SUA)
16. Mr Arne Cartridge, Leidar (former Yara), Oslo, Norway.

ANNEX IV. SOCIO ECONOMIC CHARACTERISTICS OF RESPONDENTS IN KISARAWA DISTRICT

Sno	Sex	Age	Crops produced	Crops sold	Fertilizers usage	Status	Village
1.	Male	58	Cassava, Sorghum, Maize, Cashew nut	Cashew nuts	No Industrial fertilizers/ Agrochemicals applied	Ward Executive Officer	Kurui
2.	Female	36	Cassava, Sorghum, Maize, Paddy, Cashew nut	Cassava and Cashew nuts	No Industrial fertilizers/ Agrochemicals applied	Farmer	Kurui
3.	Female	57	Cassava, Sorghum, Maize, Cowpeas, Pigeon peas, Simsim, Groundnuts, Cashew nut	Cassava, Cashew nuts	No Industrial fertilizers/ Agrochemicals applied	Farmer	Kurui
4.	Male	39	Cassava, Sorghum, Maize, Paddy, Simsim, Groundnuts, Cashew nut	Sorghum, Cashew nuts	He applies only Agrochemicals in Cashews (Sulphur)	Councilor	Kurui
5.	Male	53	Cassava, Sorghum, Maize, Paddy, Groundnuts, Cashew nut	Paddy, Cashew nuts	No Industrial fertilizers/ Agrochemicals applied	Village Executive Officer (VEO)	Kurui
6.	Female	35	Cassava, Sorghum, Maize, Paddy, Simsim, Cashew nut	Cassava, Cashew nuts	No Industrial fertilizers/ Agrochemicals applied	Farmer	Kurui
7.	Female	50	Cassava, Sorghum, Maize, Paddy, Cashew nut	Cashew nuts	No Industrial fertilizers/ Agrochemicals applied	Farmer	Kurui
8.	Female	40	Cassava, Sorghum, Maize, Paddy, Simsim, Pumpkins, Cashew nut	Simsim, Pumpkins, Cashew nuts	He applies only Agrochemicals in Cashews (Sulphur)	Farmer	Kurui

**ANNEX IV. SOCIO ECONOMIC CHARACTERISTICS OF THE RESPONDENTS’
CONT...**

Sno	Sex	Age	Crops produced	Crops sold	Fertilizers usage	Status	Village
1.	Male	37	Cassava, Sorghum, Paddy, Maize, Cashew nut, Oranges	Cassava, Cashew nuts	He applies only Agrochemicals in Cashews (Sulphur)	Village Executive Officer (VEO)	Kidugalo
2.	Male	61	Cassava, Sorghum, Maize, Cowpeas, Simsim, Cashew nut	Cassava and Cashew nuts	He applies only Agrochemicals in Cashews (Sulphur)	Village Chairperson	Kidugalo
3.	Female	42	Cassava, Maize, Pigeon peas, Cashew nut	Cassava, Cashew nuts	She applies only Agrochemicals in Cashews (Sulphur)	Farmer	Kidugalo
4.	Male	32	Cassava, Maize, Cashew nut	Cashew nuts	He applies only Agrochemicals in Cashews (Sulphur)	Farmer	Kidugalo
5.	Male	47	Cassava, Maize, Cowpeas, Cashew nut	Cashew nuts	He applies only Agrochemicals in Cashews (Sulphur)	Farmer	Kidugalo
6.	Male	37	Cassava, Maize, Cowpeas	None	No Industrial fertilizers/ Agrochemicals applied	Farmer	Kidugalo