

The Gender and Equity Implications of Land-Related Investments on Land Access and Labour and Income-Generating Opportunities

A Case Study of Selected Agricultural Investments in Northern Tanzania



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by
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Abbreviations and Acronyms

ACT	Agricultural Council of Tanzania
ASDP	Agricultural Sector Development Programme
ASDS	Agricultural Sector Development Strategy
ATE	Association of Tanzania Employers
CAADP	Comprehensive Africa Agriculture Development Programme
CBA	Collective Bargaining Agreement
CFS	Committee on Food Security of FAO
CIA	Central Intelligence Agency (USA)
DADP	District Agricultural Development Plan
EST	Trade and Markets division of FAO
ESW	Gender Equity and Rural Employment division of FAO
EU	European Union
FAO	Food and Agriculture Organization of the United Nations
FDI	Foreign Direct Investment
IFAD	International Fund for Agricultural Development
ILC	International Land Coalition
JANI	Jatropha Agriculture Nutrition Initiative
JPTL	Jatropha Project Tanzania Ltd
kg	Kilogram
LARRI	Land Rights Research and Resources Institute
MCDGC	Ministry of Community Development, Gender and Children
MDG	Millennium Development Goal
NORAD	Norwegian International Development Co-operation Agency
NRC	Climate, Energy and Tenure division of FAO
RAI	<i>Principles for Responsible Agricultural Investment that Respects Rights, Livelihoods and Resources</i>
SAGCOT	Southern Agricultural Growth Corridor of Tanzania
Sida	Swedish International Development Co-operation Agency
SOFA	<i>State of Food and Agriculture 2010-11: Women in Agriculture, Closing the Gender Gap for Development</i>
TAFSIP	Tanzania Agricultural and Food Security Investment Plan
TAHA	Tanzania Horticultural Association
TANHORT	Tanhort Small Grower Development Ltd
TIC	Tanzania Investment Centre
TPAWU	Tanzania Plantation and Agricultural Workers Union
TSh	Tanzanian Shilling
UNCTAD	United Nations Conference on Trade and Development
UNDESA	United Nations Department for Economic and Social Affairs
UNDP	United Nations Development Programme
UNRISD	United Nations Research Institute for Social Development
URT	United Republic of Tanzania
USDA	United States Department of Agriculture (USA)
US\$	American Dollar
VG Right to Food	<i>Voluntary Guidelines to Support the Progressive Realization of the Right to Adequate Food in the Context of National Food Security</i>
VG Tenure	<i>Voluntary Guidelines for the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security</i>

1. Introduction¹



¹ This section is partly based on a concept note developed by the Gender and Equity Policy team of FAO's ESW division.

The Food and Agriculture Organization of the United Nations (FAO) plays a leading role in the achievement of Millennium Development Goal (MDG) 1 – the eradication of extreme poverty and hunger. The majority of the world's poor live in rural areas and have labour and land as their only or main productive assets. Therefore, promoting secure access to and control and use of land as well as secure and productive employment and decent work for women and men in rural areas is vital to achieving MDG1.

The State of Food and Agriculture 2010-11: Women in Agriculture, Closing the Gender Gap for Development (FAO 2011a, the SOFA), FAO's flagship publication, provides solid evidence showing that gender inequalities in access to agricultural assets, inputs, services and rural employment opportunities are partially accountable for the underperformance of the agricultural sector in many developing countries. It also demonstrates that the gender gap imposes real costs on society in terms of lost agricultural output, food insecurity and poorer economic growth. Without sustainable improvements in gender equity in access to land, employment and income-generating opportunities, the achievement of global food security and poverty reduction targets will be seriously undermined.

At the same time, the global food and financial crises over recent years have led development policy-makers and international organizations to re-prioritize the role of agriculture within both international and national policy agendas. The importance of investing in agriculture and rural development has been widely emphasized, and several international initiatives have focused on ensuring such investment is responsible, sustainable and beneficial to the majority of poor people in rural areas. These initiatives include the *Principles for Responsible Agricultural Investment that Respects Rights, Livelihoods and Resources* (FAO et al 2010, the RAI), the *Voluntary Guidelines for the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security* (FAO 2011b, the VG Tenure), and the *Voluntary Guidelines to Support the Progressive Realization of the Right to Adequate Food in the Context of National Food Security* (FAO 2005, the VG Right to Food) – all of which FAO's Committee on Food Security (CFS) are involved with.

Within this context, private investment in the agricultural sector of developing countries, including through foreign direct investment (FDI), is considered necessary in order to help raise agricultural productivity and total agricultural production as well as rural income, employment and well-being. As the recent SOFA has shown, however, it is clearly essential that such investments address gender and equity issues alongside efficiency and economic and agricultural growth.

Land-related investments in agriculture, especially foreign-financed ones, have been particularly heavily debated in recent years – often seen as a form of 'land grabbing'. Many land-related investments in developing countries, especially involving large-scale land acquisition, are accompanied with promises of capital investments that build infrastructure, bring new technologies, and create employment, know-how and market access, among other benefits. Yet both opportunities and threats in terms of employment and income generation arise for women and men small-scale farmers and wage workers when such investments take place.

Hard evidence on the implications of recent agricultural investments for the poverty status and food security of rural women and men is still limited, particularly from a perspective which looks at gender-differentiated implications and the potential consequences of these investments for rural development.² The Gender Equity and Rural Employment (ESW) division of FAO, in consultation with the International Land Coalition (ILC), and the Trade and Markets (EST) and Climate, Energy and Tenure (NRC) divisions of FAO, has therefore developed a programme of work to contribute to filling this gap. The overall programme objective is to explore

whether land-related investments have gender-differentiated implications in terms of labour, income-generation opportunities and access, control and use of land and thus affect the

² Two exceptions to this, which make an initial attempt to explore the gender implications of the current 'land-grabbing', are Daley (2011) and Behrman et al (2011).

livelihood and food security of the rural populations that live in the areas where the investments take place.

The programme, entitled *Support for the formulation and implementation of gender-equitable and inclusive land-related investment policies, programs and strategies that contribute to enhance food security, reduce poverty and strengthen the livelihood of poor rural women and men*, seeks to develop a better understanding of the gendered implications of land-related investments on rural livelihoods and labour-related issues in order to:

- 1) generate knowledge, raise awareness and inform policy-making processes about gender-differentiated implications of land-related investments to promote more beneficial policy and legislative frameworks for investments to take place;
- 2) identify and showcase good practices in terms of gender-sensitive business models and strategies that have positive implications for rural employment and income-generating activities for both women and men; and
- 3) foster constructive dialogue among policy-makers, local government authorities, rural organizations and the private sector so that more gender-equitable investments can be secured.

The FAO work programme has a number of complementary components, including a series of case studies in countries where private foreign investments are already operational. The present report, on agricultural investments in Northern Tanzania, is the first in this series of case studies. It is based primarily on a period of three weeks fieldwork in Tanzania in June 2011, in which interviews were held with some 28 key informants and with over 141 people (89 women and 52 men) who were consulted in 16 focus group discussions with local farmers, outgrowers and wage workers. The fieldwork was carried out with the active support of two private sector companies investing in agriculture in Northern Tanzania – Diligent Tanzania Ltd and Multiflower Ltd – and of a 100% private sector apex member-based organization, the Tanzania Horticultural Association (TAHA), as well as with the facilitation of the FAO Tanzania Country Office and the Government of Arusha Region in the United Republic of Tanzania.

The emphasis of the case study is on agricultural investments which do not rely on large-scale land acquisition; four of the five income-generating opportunities explored during the fieldwork involved local farmers and outgrowers using land they either owned or rented themselves. It is also on good practices from a gender and equity perspective within the businesses examined, rather than on their long-term financial viability. Importantly, this is also a qualitative case study, designed from the outset to be an exploration of issues rather than any kind of systematic or statistically representative quantitative study. The FAO programme of work envisages other components to support the qualitative fieldwork of the country case studies, including follow-up surveys in the areas where qualitative research has already taken place and additional fieldwork in different regions of the same country. To that end, the present report flags up (in Annex 4) issues that might warrant further and more systematic investigation through such a follow-up survey or additional research.

This report is organized as follows. Section 2 briefly overviews the background and policy context both globally and in Tanzania, in relation to gender and land-related, and specifically agricultural, investments. The study methodology is also described further. Section 3 comprises the main body of the case study, including analysis and findings from the labour and income-generating opportunities that were explored during the fieldwork. Some general findings from the focus group discussions and from the iterative research approach are also set out. Section 4 then ends the report with overall conclusions and policy recommendations for land-related investments in agriculture.

2. Background and Policy Context



Concerns about the potential gender and equity implications of land-related investments on labour and income-generating opportunities come in the context of the current global policy interest in supporting agricultural investment in developing countries in general. However, there is a long history of land-related investments in developing countries, particularly agricultural investments, which partially explains the current concerns. Over the last 60-70 years, large-scale rural development and agricultural investment schemes have been a feature of economic development efforts in many former colonies and newly-independent states, albeit mainly in the period up to the ‘structural adjustment’ crises of the 1980s when the importance of the private sector for sustainable development started to become increasingly clear. These land-related development schemes frequently had very strong government involvement and donor financial support, and they are therefore not directly comparable with the current situation where the private sector is generally much more involved.

Nevertheless, the “lessons from history...[are]...that large-scale rural development schemes involving technical change and new farming systems or practices often negatively impact on women” (Daley 2011, p.11). Irrigation and agricultural production schemes involving resettlement and land registration have famously seen women lose access to and control of their land and labour and the income from them, for example in Sri Lanka, the Gambia and the Sudan (Agarwal 1994, p.290; Bernal 1988; Carney 1988; Dey 1981; Watts 1993). Large-scale agricultural projects involving contract farming have also been heavily criticised, with one recent review of the literature on such schemes in Sub-Saharan Africa concluding that “women are generally not involved in contracting with agro-industrial firms and are disadvantaged in contract schemes” (Schneider & Gugerty 2010, pp.1-2). Similarly, in Latin America, although technological changes in agriculture led to a major expansion of women’s wage work in non-traditional agro-export production, this has brought both opportunities and threats, benefits and costs, in terms of rural livelihoods and gender relations (Deere 2005).

Land-related investments in agriculture in developing countries have typically taken the form of one or other of two main business models – the plantation (or estate) model, where the project or investor acquires the land and employs wage workers and casual labourers to farm it, and the outgrower (or contract farming) model, where local small-scale farmers produce crops for the project or investor with varying degrees of contractual obligations. The two models were/are not completely separate as outgrowing was and often still is associated with nucleus estates. Nevertheless, as a result of past experiences and their accompanying negative gender and equity implications, including concerns about negative implications for the livelihoods and food security of poor rural women and men, there is now growing interest in looking at the possibilities for agricultural development through a broader range of business models that allow for different scales of production and greater flexibility across the value chain. Thus, it is now accepted that there are a variety of possible alternatives to agricultural investments requiring large-scale land acquisition for plantations, including hybrid models, farmer-owned businesses, joint ventures, community-investor partnerships, public-private partnerships involving social investment funds, and a range of ethical (fair) trade initiatives (e.g. see Cotula & Leonard 2010; SAGCOT 2011).

2.1 Situating the Tanzanian Case

2.1.1 Overview of the Broader Country and Policy Context

Tanzania is a large country located in the eastern part of sub-Saharan Africa and it had an estimated population of around 45 million people in 2010 (UNDESA 2009). Per capita income was just US\$ 362 in 2008, in the bottom 10% of the world’s economies, with 58% of the population living on less than US\$ 1 per day, and Tanzania ranks only 148 out of 169 in the United Nations Development Programme (UNDP) Human Development Index (CIA World Fact Book 2010; UNDP 2010; FAO 2010, p.24). The economy depends heavily on agriculture, accounting for over a quarter of gross domestic product (GDP), providing 85% of exports and employing 80% of the labour force (CIA World Fact Book 2010). Agriculture is dominated by food production, with maize the main food crop alongside sorghum, millet, rice, wheat, beans, bananas and potatoes; coffee is the main cash crop alongside sisal, cashew, cotton, tobacco, tea, cloves,

flowers and oil seeds. Agricultural productivity is comparatively very low, with agriculture depending mainly on small-scale farmers who cultivate average farm sizes of between 0.9 and 3 hectares (ActionAid 2009, p.14). The female proportion of the total agricultural labour force is 79.7%, reaching 91.7% in rural areas (Ministry of Finance and Economic Affairs 2010). Female-headed households make up 25% of total households nationally and 24% of households in rural areas (National Bureau of Statistics 2009).

The food security of many households in Tanzania is vulnerable to repeated climatic and economic shocks, and sustained low crop production in recent years has led to food insecurity at both household and national levels (ActionAid 2009, p.16; FAO 2010, p.24). Some estimates put 60% of Tanzanians in the rural areas as facing food insecurity (ActionAid 2009, p.16). According to the *National Strategy for Growth and Poverty Reduction II*, or *Mkukuta II*, 70% of Tanzania's population live in rural areas, as do 80% of Tanzania's poor people; they all depend on agriculture as a source of income. Agriculture is therefore central to poverty and hunger reduction (Ministry of Finance and Economic Affairs 2011). Agriculture accounts for around 75% of rural household incomes, and 1% growth of the agricultural sector would have a higher positive multiplier effect on rural incomes than the same growth rate in any other sector (ASDP Evaluation 2011).

The *Mkukuta II*, to be implemented between 2010/11 and 2014/15, is a vehicle for realizing Tanzania's *Development Vision 2025*, which aims to achieve the MDGs with a strong and competitive economy and high quality livelihood for all Tanzanians by 2025, including food security and gender equality (URT no date). In order to achieve these objectives, and given the importance of agriculture for rural livelihoods, the Government of the United Republic of Tanzania has embarked on various initiatives to address the challenges affecting the sector. In 2006, it launched the *Ten Year Agricultural Sector Development Programme* (ASDP) as the joint implementation tool of the *Agricultural Sector Development Strategy* (ASDS), the *Mkukuta II*, and the *Development Vision 2025*. In 2009, the *Kilimo Kwanza* (Agriculture First) initiative was adopted, as Tanzania's 'Green Revolution' to transform both small-scale and large-scale agriculture into a modern and commercial sector through technological and political reforms, public-private partnerships, value chain approaches and foreign investments, including immediate prioritization of support for small-scale farmers (Kilimo Kwanza 2009). In 2010, the *Southern Agricultural Growth Corridor of Tanzania* (SAGCOT) was launched to mobilize public and private sector partnerships to deliver agricultural growth around a high potential southern corridor (SAGCOT 2011). Tanzania signed its national *Comprehensive Africa Agriculture Development Programme* (CAADP) Compact in 2010 and the *Tanzania Agricultural and Food Security Investment Plan* (TAFSIP), under preparation at the time of the fieldwork, was expected to provide the overall framework for prioritizing investments in the sector, in line with strategic priorities identified in the CAADP Compact (URT 2010a).

Foreign investment in Tanzania has grown dramatically since the *National Investment (Promotion and Protection) Act* was passed in 1990, aided by new land laws passed in 1999 – the *Land Act* and the *Village Land Act* – which have made the procedures for foreign investors to acquire land more straightforward.³ However, huge difficulties arise in assessing the precise extent of foreign land acquisition in Tanzania in general, while foreign interest in agricultural investments has also been much lower over the past two decades than for investments in sectors such as manufacturing, tourism and transportation.⁴

The *Constitution of Tanzania* guarantees gender equality and supports women's full participation in social, economic and political life. To support this, the Government has taken various measures to mainstream gender perspectives in sectoral policies, strategies and programmes, including the *Development Vision 2025*, the *National Women and Gender Development Policy* of 2000 (under revision at the time of the fieldwork), the *Employment and Labour Relations Act* of 2004, the *National Employment Policy* (2008), the *Mkukuta II* and the ASDP. For example, the *Employment and Labour Relations Act* prohibits discrimination in the work place on the basis of gender, sex, marital status, disability and pregnancy, among others. The *National Employment Policy* states (p.26) that “the government, the private sector, Workers organizations, Civil

³ Much has been written on the Tanzanian land reforms. See Sundet (2005) for an analysis of the background and practical implications, Pederson (2010) for a summary of recent challenges and state of play, and Knight (2011) for an analysis of issues for local people with customary land rights.

⁴ See unpublished study on agricultural investment deals in Tanzania by Daley and Scott (2011).

Societies in collaboration with other stakeholders shall ensure provisions for fair and equal treatments for both men and women in accessing employment opportunities as guided by gender policies, actions plans and employment laws”; it also calls on the government to take affirmative action to facilitate easy access to productive employment opportunities among women in both wage and self-employment. In agriculture, the *Kilimo Kwanza* resolution does not specifically address gender, although its *Implementation Framework*, under Pillar 8 (on Science, Technology & Human Resources for *Kilimo Kwanza*), calls for mainstreaming gender in *Kilimo Kwanza* and developing programmes to strengthen the position of women in agriculture. The ASDP is more ostensibly gender-sensitive; gender is identified as a cross-cutting and cross-sectoral issue and the ASDP requires districts to formulate participatory funding proposals that comply with policy and regulatory frameworks on such issues. Annual assessment of district-level ASDP implementation performance is also required against criteria that include evidence that local investments meet social and gender standards.

Nevertheless, policy frameworks and implementation issues are separate matters. A recent evaluation of the ASDP, for example, has evidenced that gender has received little focus so far in practice; nation-wide, only 22% of extension staff are female and District Agricultural Development Plans (DADPs) are also reported as being weak with regard to a gender or youth focus (ASDP Evaluation 2011). A recent ActionAid review of progress on implementing the CAADP was also critical of the overall lack of gender analysis, and specific lack of analysis of the role of women as the main contributors to cultivation, in both the ASDP and the TAFSIP (ActionAid 2011, pp.6-7).

2.1.2 Background to the Case Study Businesses

The majority of the fieldwork for this case study of agricultural investments in Northern Tanzania took place in Arusha Region, a brief statistical profile of which is presented in Box 1, below.

Box 1: Statistical Profile of Arusha Region, Northern Tanzania

Total regional population: 1,404,838
Female share of total regional population: 51.87%
Rural population as percentage of total regional population: 66.77%
Female headed households in rural areas: 32%
Formal labour force participation in the region: 322,899
Female share of total formal labour force participation: 52.59%
Agriculture as percentage of total formal labour force participation: 84%
Share of female formal labour force participation in agriculture: 90%

Source: *National Panel Survey 2009* (National Bureau of Statistics 2009)

The case study focuses on three different businesses covering five different types of labour and income-generating opportunities in two different sectors – biofuels and horticulture. Both sectors present their own opportunities for labour and income generation for rural women and men, but both have also been subject to controversies.

Global interest in biofuels has grown increasingly over the past five or six years in the context of both the recent global food and financial crises and the broader environmental/climate change agenda. In Tanzania, an intense initial rush of speculative interest in biofuels stimulated a wave of investments from around 2005 onwards, the majority of which have subsequently collapsed or otherwise stalled. This wave of investments in turn stimulated anxiety, particularly on the part of civil society, over the threat of ‘land-grabbing’ if biofuels were to be produced on a large-scale on plantations. In response, the Government of the United Republic of Tanzania temporarily halted new land acquisitions for biofuels and embarked on a long process of drafting a set of *Guidelines for sustainable liquid biofuels development in Tanzania* (URT 2010b). These guidelines are very broad and do not address either solid biofuels or the domestic use of biofuels, being

geared more towards issues around foreign-financed investment in biofuels in Tanzania; they also barely mention gender.⁵ However, they form a basis for an ongoing policy-making process, involving a review of all related legislation through a NORAD and Sida-funded project at the time of the fieldwork. A large and largely critical literature on biofuels grows by the day (e.g. see Palmer 2011a, 2011b 2011c) and a number of specific studies have covered the sector in Tanzania (ActionAid 2009; Sulle & Nelson 2009; Chachage 2010; FAO 2010; LARRI 2010; Sosovele 2010; Mitchell 2011). However, there is almost no substantive detail on the gender implications of biofuels investments, either in Tanzania or in general.⁶

In contrast to biofuels, horticulture has a longer history in Tanzania (c.f. Kearney 2006). Investments in the sector began in the mid-1990s, following the perceived success of similar investments in neighbouring Kenya. Europe-wide processes of retail concentration and transformation of supply chains in the 1990s – whereby supermarkets came to exercise increasing influence on commodity chains, with fresh fruit and vegetables a key area of competition – supported the rapid development of the African horticultural sector (Dolan & Humphrey 2000, p.6). Between 1989 and 1997, the value of exports of fresh vegetables from sub-Saharan Africa to the European Union (EU) increased by 150%, and by 1999 most fresh vegetables sold in UK supermarkets were sourced from Africa (Ibid, pp.1, 8). In Tanzania, the largely foreign-financed horticulture industry has grown rapidly over the past two decades, with products for export including cut-flowers (mostly roses), flower cuttings and vegetable seeds. Horticulture is now the fastest growing agricultural sub-sector in Tanzania, worth some US\$ 45 million per year and providing direct employment to more than 10,000 people. The sector is concentrated in Northern Tanzania, and women make up over 60% of the workforce (TPAWU 2011).

Horticulture globally has been criticised for some of its implications for women wage workers and outgrowers (e.g. Dolan 2001; Deere 2005). However, the horticultural sector is now considered the best within Tanzanian agriculture in terms of good practices and compliance with labour laws, and it has benefited tremendously from the effects of two projects carried out by the Tanzania Plantation and Agricultural Workers' Union (TPAWU) between 2005 and 2010 specifically to look at gender issues in horticulture.⁷ As part of one of these projects, action research was conducted to unveil outstanding labour and gender issues in horticultural plantations, including gender segregation and division of labour, sexual harassment, lack of maternity protection, and so on (TPAWU 2011). TPAWU conducted trainings targeted at managers and workers especially on the fresh flower farms, along with advocacy campaigns to sensitize staff in relevant government ministries, the public and horticultural wage workers. By the end of the project in 2010, 100% of these farms had adopted Collective Bargaining Agreements (CBAs) and 80% of workers had been unionized by TPAWU. As a consequence of the increased awareness of labour regulations, 90% of formal wage workers in Tanzania's horticultural plantations now also have legal contracts. Meanwhile, the Tanzania Horticultural Association (TAHA), in collaboration with TPAWU and the private sector Association of Tanzanian Employers (ATE), has developed a joint model CBA to guide employer/employee and employer/farmer relationships in horticulture, in which investors are encouraged to go beyond but not below the minimum criteria and conditions. The CBA is highly gender-sensitive but had not yet (at the time of the fieldwork) been endorsed as policy by the Tanzanian government.

Businesses from these two sectors – biofuels and horticulture – were selected for the present study in part because they involve land-related investments that are largely foreign-financed and private sector-led. Further, both sectors are relatively recent additions to agricultural investment and development in Tanzania, and both are export-linked and driven by contemporary global market and economic fashions. However, the main selection criterion for the choice of specific businesses explored in the fieldwork was that they would represent a range of different approaches to land-related investments involving farmers, outgrowers and wage workers, and in particular to different possibilities for labour and income-generating opportunities

⁵ The sole mention comes in Article 45: Mainstream HIV/AIDS control and Gender Sensitivity in Biofuel projects and programme(s).

⁶ Rossi & Lambrou (2008) present potential gender implications of biofuels investments, and gender implications of biofuels investments in Tanzania are discussed in an unpublished study by Daley & Scott (2011), but the literature is otherwise thin.

⁷ 'Promoting women's rights in African horticulture' (2005-2007), funded by the Dutch trade union federation, FNV, and 'Developing strategies for change for women in African horticulture' (2008- 2010), funded by the UK's Comic Relief through Women Working Worldwide.

using land that rural women and men either owned or rented themselves. In terms of labour and income generation, the selected investments enabled analysis to be conducted of five different opportunities: jatropha seed collection, flower seed production, vegetable seed production, wage work in a horticultural factory, and fresh vegetable production. In terms of business models, the selected investments enabled analysis for group-based outgrower arrangements (in jatropha and fresh vegetables), for individual informal farming (in jatropha), for individual formal outgrower arrangements (in flower and vegetable seeds), and for involvement in agricultural investments as permanent wage workers.

2.2 Fieldwork Methodology

The Tanzanian case study set out to explore the following three broad research questions:

- Do the selected investments/businesses have gender-differentiated implications with respect to labour and income-generating opportunities for small-scale farmers and wage workers directly involved in and/or affected by these initiatives?
- Do the land-related investments analyzed affect poor rural women and men differently in their access, use and control of land?
- Do the land-related investments analyzed provide good practices in relation to employment and land which can be used as models for regulatory frameworks on investments and policy-making?

In order to address these issues, a qualitative approach to fieldwork was adopted, combining key informant interviews with a series of structured focus group discussions. In total some 28 key informants were interviewed in Arusha and Dar-es-Salaam, and over 141 people (89 women and 52 men) were consulted in 16 focus group discussions in different locations within Arusha Region. Key informants interviewed included company managers, company field staff, national and district government officials, and representatives of national and local NGOs and farmers' and workers' organizations; a full list is provided at Annex 1.

Focus group participants were drawn from among the farmers, outgrowers and wage workers involved with the three different businesses examined. The focus groups were differentiated so that some groups were mixed, some were men-only and some women-only, and some women-only groups were also differentiated according to the age and/or marital status of the women. A full list of all focus groups held is provided at Annex 2.

The 141 participants in the focus groups comprised 37% men and 63% women; the majority were of working age rather than very young or very old due to the nature of focusing on active agricultural investments. The age distribution by sex was as set out in Chart 1, below, and the distribution by marital status as set out in Chart 2, also below. Annex 3 sets out the demographic distribution in greater detail.

Chart 1: Sex and Age of Focus Group Participants

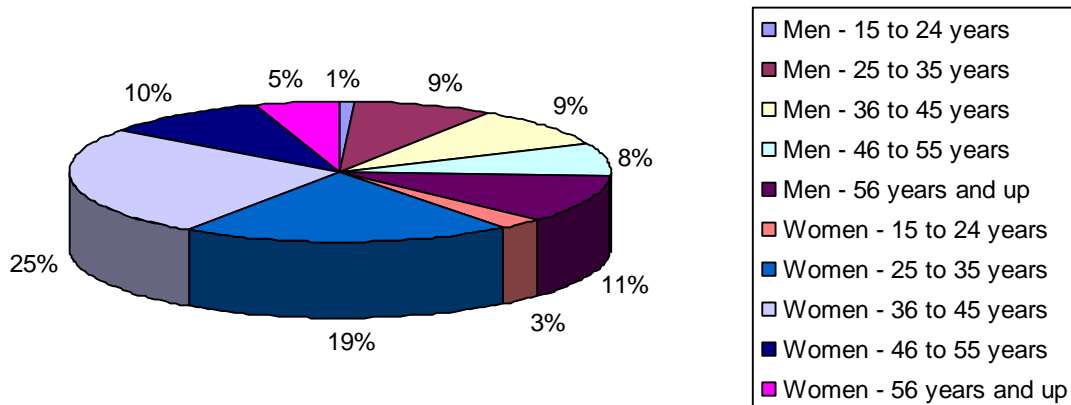
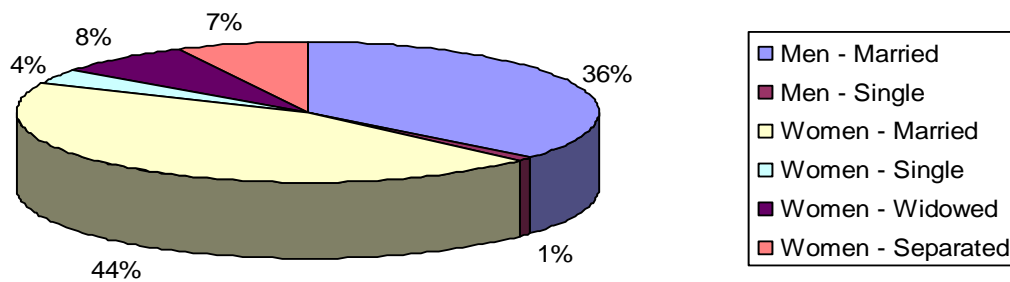


Chart 2: Sex and Marital Status of Focus Group Participants



The focus group discussions were organized with the kind support of the staff of Diligent Tanzania Ltd, Multiflower Ltd and TAHA. However, this means that rural women and men who were not involved with the agricultural investments being examined were not consulted by way of control or comparison during the fieldwork. It also means that the possibilities for differentiation between the groups was to some extent influenced by which farmers, outgrowers and wage workers turned up to participate. Furthermore, it is important to stress here that no attempt was made to create any kind of statistically representative sample of any particular population subset; instead a deliberate effort was made within the qualitative approach to consult a broad cross-section of local people involved with these businesses, including women and men of different ages and marital statuses. In three of the five labour and income-generating opportunities explored both women and men were consulted, but in the other two only women were consulted. First, among wage workers at Multiflower Ltd focus groups were held only with women because of time constraints and because of the high preponderance of women workers in the broader horticulture sector and the uniqueness of the opportunity presented to talk with women permanent employees differentiated by marital status. Second, among farmers and outgrowers involved with TAHA-supported fresh vegetable production, focus groups were held only with women because of the special emphasis TAHA was giving to supporting women in becoming more formally involved in the horticultural sector, in order to improve their access to opportunities that are often more readily and easily taken up by men.

The question guides used in the focus groups allowed for extended qualitative discussion of experiences and opinions. However, some generic questions were also used to gather some very basic numerical data across the groups, the aim of which was primarily to provide some indicative data on issues that might benefit from

being systematically researched in a follow-up survey or quantitative study. Annex 4 presents the data collected in this exercise on labour and training issues, while Annex 5 presents samples of individual case histories that were also uncovered during some of the focus groups. In addition, the linkages between land and labour and how they affect rural livelihoods and gender equality in the context of land-related investments could be a topic for further and more detailed investigation.

The case study methodology was deliberately fieldwork-intensive, but the interviews and group discussions were complemented by a brief desk-based review of background literature and collection of relevant supporting documents in Tanzania. A full list of all documentary and literature references cited in this report is provided at Annex 6.

A number of key issues were also identified prior to the fieldwork to guide and structure the research and analysis, as far as relevant to and possible for each of the five different labour and income-generating opportunities explored. These issues are:

- the type of investment schemes adopted and types of crops cultivated (before and after the investment occurred) in the areas selected;
- existing conditions prior to the investment with regards to gender division of labour (and time allocation) and land use patterns, including quality of land and access to water;
- existing conditions prior to the investment with regards to gendered livelihoods and food production and access to food;
- gender inequalities as a factor influencing access to new employment opportunities arising from the investment – whether regular employment on plantations or ‘employment’ as an outgrower;
- gender inequalities in ‘employment’ conditions for workers and outgrowers;
- gendered implications for labour and the household/community dynamics, particularly impact on time, household reproduction, and food security, as well as overall impact on tenure security and women’s land rights (if relevant) and links between land and labour;
- gender differences in access to collateral benefits from the investment such as access to farming inputs (fertilisers and so on), and to infrastructure and/or social services provided as part of the investment;

The analysis of each of the five different types of labour and income-generating opportunities in the next section therefore broadly follows this order, while an attempt is made to answer the three overall research questions (listed above) in drawing general conclusions in Section 4.

3. The Case Study



In this part of the report, each of the three businesses that were examined during the fieldwork are presented in turn, including background information and main findings of the research on each individually. The three are Diligent Tanzania Ltd, Multiflower Ltd, and the TAHA-supported group-based approach. The second of these, Multiflower Ltd, is covered in three sub-sections so as to address the three different labour and income-generating opportunities explored within that business. Thus, this section of the report addresses all five of the labour and income-generating opportunities explored in the fieldwork – jatropha seed collection, flower seed production, vegetable seed production, wage work in a horticultural factory, and fresh vegetable production.

Diligent Tanzania Ltd and Multiflower Ltd are both private sector companies operating on a commercial basis, although Diligent has received some funding from a charitable foundation. TAHA, as noted above, is a 100% private sector apex member-based organization which receives donor funding to support some of its activities that promote the Tanzanian horticulture sector in general but which also runs some separate commercial operations of its own.

Following the analysis of the three businesses, a few general findings from the focus group discussions about impacts of and attitudes to agricultural investment are then set out, as well as from the iterative research approach employed.

3.1 Diligent Tanzania Ltd

Diligent Tanzania Ltd was established in 2005 and is 100% owned by Africa Holdings. Africa Holdings' sole shareholder is currently (at the time of the fieldwork) the Dutch Foundation Doen, which receives funding from the Dutch lottery and has a mandate to support good causes and ensure farmers benefit from the investment. Thus, although Diligent is a private sector company concerned to operate profitably in the longer-term, it has benefited during start-up from some charitable funding.

Diligent had a staff of 13 permanent employees at the time of the fieldwork, including four field officers (three men, one woman) and eight workers at the company's factory site in Arusha town; around six casual labourers are also employed at the factory during the peak collection season of February to June-July. The company estimated to be collecting jatropha seeds from over 50,000 farmers at the time of the fieldwork, although this number is increasing all the time.

Diligent's business model is based on a unique system of collecting jatropha seeds from farmers who already have jatropha hedges on their land. Diligent actively discourages farmers from planting jatropha on their land as a main crop, except at the edges of fields as hedges and fences to mark boundaries and keep livestock off their food crops. The company does this because it feels it can be profitable in this way without becoming involved in the 'land grabbing' debate. It also does not operate any kind of formal outgrower model directly with farmers, largely to keep production costs down until it moves into operating profit.

Instead, the company is currently operating two different jatropha seed collection systems. The first is a system of local collectors, supervised by the company's field officers. These collectors are farmers who act as middlemen, receiving cash payments in advance from the company according to what the collection record in their area has been historically and what the estimated amounts of seeds to be collected are; these cash advances enable them to buy seeds for cash directly from local farmers in their areas. They then store the seeds at collection sites, from where Diligent trucks come and pick them up for processing at the factory.

The company estimates that around 65% of farmers who bring their jatropha seeds to Diligent through this collection system are women. Within Arusha and its surrounds, Diligent had around 70 collectors (middlemen) at the time of the fieldwork (of whom around 80% were men) and some 5,000 farmers.

However, as noted above, numbers are growing all the time. The price paid to collectors by Diligent is TSh 300 per kg of dried seeds (approximately US\$ 0.20) and they are supposed to keep TSh 60 (US\$ 0.04) for themselves and pass on TSh 240 per kg (US\$ 0.16) to the farmers.⁸ These prices have been printed on calendars which collectors are supposed to display at their collection sites for farmers to see, but the company acknowledges that despite the monitoring and supervision efforts of its field officers, many of the collectors do not pass the correct amount onto the farmers (see below).

Some Diligent collectors are farmers who attended seminars in Arusha between 2006 and 2010 that were run by the Jatropha Project Tanzania Ltd (JPTL), and who expressed interest at those seminars in becoming collectors. Through the seminars they have acquired some knowledge of jatropha agronomy and care, and part of their role is to advise farmers on activities such as pruning, to prevent the jatropha hedges from overshadowing the food crops planted on their land. Other activities include extending their networks of farmers whom they collect jatropha seeds from, and recruiting new collectors.

The second jatropha seed collection system that Diligent is operating, which only started in November 2010, is organized in collaboration with an American NGO called Partners for Development. This NGO has been running the Jatropha Agriculture Nutrition Initiative (JANI) in Tanzania since 2008, funded by the United States Department of Agriculture (USDA), and it initiated this seed collection system to increase the benefits to farmers from jatropha. The JANI project began with a baseline mapping exercise of areas where jatropha is grown, and led on to sensitization work with farmers about jatropha as an additional source of cash income and an alternative energy source at household level. For example, the project has trained farmers on how to use jatropha seeds for cooking and has developed a new cooking stove that uses pellets that Diligent makes (see below). Partners for Development was working with around 35,000 farmers selling their jatropha seeds to Diligent at the time of the fieldwork, in eight regions of Tanzania's Northern, Central and Lake zones through some ten local partner organizations in the different areas, including church groups, local NGOs and not-for-profit companies.

One such partner is Arusha-based Faida-MaLi, a local not-for-profit company with the objective of assisting farmers to find markets for their crops. Faida-MaLi works in collaboration with local governments to mobilize farmers with jatropha on their land to form groups linked to Diligent through Partners for Development's JANI project. Faida-MaLi works directly with the groups to help strengthen farmers' capacity in activities such as negotiation skills, record-keeping and group organization. The farmer groups contain around 50 farmers each and are mixed (men and women) but include some women leaders; this is possible because jatropha is still largely within women's control, as picking the seeds is seen as mainly an activity for women and children (see below). Faida-MaLi supports the group model of jatropha seed collection because it sees it as enabling farmers to share risks and accept new things more easily.

With this group model, Diligent still pays TSh 300 per kg of jatropha seeds (US\$ 0.20) but the farmers individually receive between TSh 250 and TSh 280 per kg depending on what is decided by each group (US\$ 0.17 to US\$ 0.19). The balance goes to the group to meet its joint costs of things like security at the seed collection site, paying for a clerk to keep records, purchasing weighing scales, and so on. Part of the money that goes to the group also goes towards the realization of social goals in the local community, with some groups having already established small credit schemes to enable individuals within the group to get loans. The groups have contracts with Diligent that were drawn up by Partners for Development, in which the prices are clearly stated and the names of the individual farmers in the group are all listed at the back. Group members carry their own individual seeds to their collection site and Diligent provides the transport to bring the seeds to Arusha whenever there are enough sacks of seeds to make it financially worthwhile.

The main harvesting time for jatropha seeds in Tanzania is between February and May, which is not a peak farming period for the main local food crops, maize and beans. This means that farmers have more time available for jatropha seed picking without this activity interfering with their food crop farming, as they are mainly waiting for the maize and beans to be ready to harvest and only have some weeding to do on those crops. Transport is also cheaper for jatropha seed collection at this time because it is not needed for the

⁸ US\$1 = TSh 1,500 at the time of the fieldwork.

maize harvests. Additionally, the cash income from the jatropha seeds comes at a time when farmers are not able to get any cash income or food from their food crops – in what is often the ‘hungry season’ before the maize harvests come in. However, if the rains are good there is also the possibility for farmers of a second (shorter) harvesting season for jatropha seeds from June to August, which does coincide with the main maize and beans harvest.

The main long-term target market for Diligent’s jatropha products is domestic – within Tanzania. The company presses the jatropha seeds at its factory in Arusha town and filters and processes 22% of the pressing product as oil. At present crude jatropha oil is mainly exported to Europe and the USA, via the port in Dar-es-Salaam, where it is used to produce bio-kerosene to fuel aeroplanes. However, the company’s aim is to develop a domestic market for the oil, in part to reflect environmental concerns about the current exports. Some jatropha oil is already sold in Tanzania to makers of jatropha soap, and to some hotels and safari lodges in the Arusha area which have generators and some vehicles that run on jatropha fuel.

A further 8% of the pressing product is sediment, but the remaining 70% is seedcake which the company has been developing other products for since 2009. The first product is the manufacture of seedcake briquettes as a local fuelwood alternative for open cooking fires and ovens. The second product is the manufacture of seedcake and rice-husk pellets for local household use in improved stoves. These stoves have been designed and were still being trialled by Partners for Development at the time of the fieldwork, and there was keen interest expressed in using them in the focus group discussions with Diligent farmers and collectors.

Focus group discussions were held with both farmers and collectors in Arusha Region who were involved with the first of the two seed collection systems. All of them were selling jatropha seeds to Diligent as a supplementary livelihood activity in addition to their existing and ongoing farming activities. Before Diligent provided a market for the seeds, farmers who had planted jatropha hedges to mark boundaries and serve as fences on their land obtained no income from them; no labour was expended in collecting seeds and the land where the jatropha hedges were located was not used for any other purpose. Gendered divisions of labour in farming were before as now, with women largely responsible for food crop production and tasks such as weeding, and men mainly responsible for production of cash crops such as coffee. Families of participants in the focus group discussions depended heavily on their food crop production, and in years when maize and bean harvests were bad, their food security suffered.

Children sometimes used to collect fallen jatropha seeds and play with them; they were also known to have some medicinal uses – the sap being used to treat toothache and skin diseases, for example – and to be a source of light when burnt on the end of a stick. At first when Diligent and other companies established a commercial market for jatropha seeds in 2005, during the then intense initial rush of speculative interest in biofuels in Tanzania, children were encouraged to bring the seeds to traders in exchange for a small amount of money. As Diligent’s collector system became more established, however, people saw that there was a new source of cash income to be obtained from their jatropha hedges and interest in actively picking and selling the seeds increased.⁹

According to Diligent, the company paid out some TSh 60 million to its farmers in the 2010 season, approximately US\$ 40,000; figures for the 2011 season were not yet available at the time of the fieldwork but were expected to be substantially higher as the number of farmers selling jatropha seeds is constantly growing as the collection systems improve in their geographic reach. Total cash income received from the seeds by individual participants in the Diligent farmers’ focus group in Miririny from the start of the 2011 season in February to the time of the group discussion in early June ranged from TSh 3,000 to TSh 12,000 (US\$ 2 to US\$ 8). The amount of labour required to collect an amount of seeds (a gallon tin – *sado* in Kiswahili, or just over 2kgs) for which the farmers reported to receive TSh 300 (US\$ 0.20) from their collectors was equivalent to one person’s labour over three 6-hour days (i.e. 18 hours of labour), including time for picking and de-husking, and about on par with the rate paid locally between farmers undertaking ad

⁹ Although it appeared that children were still involved in jatropha seed collection, through helping their parents when not in school in the same way that they help with other farming-related activities, child labour issues per se were outside the scope of the fieldwork and could usefully be addressed in further research.

hoc casual labour on each other's farms, at TSh 100 for a day's work (US\$ 0.07).¹⁰ In other words, work on jatropha seed collection is the equivalent in terms of profitability to undertaking casual farm labour for neighbours. However, drying and transporting the seeds to the collection site then also has to take place, requiring additional labour resources depending on the distance between the individual farmer and their collector. Moreover, the farmers reported receiving only TSh 300 from the collectors for a gallon tin/*sado* of seeds (just over 2kgs), which is substantially less than the official Diligent price of TSh 240 per kg (US\$ 0.16) that the collectors reported paying to farmers in their separate focus group discussion. The company confirmed that the farmers should be receiving around TSh 500 per gallon tin/*sado* (US\$ 0.33) and is very aware of the flaws with this collection system, hence its interest in the new Partners for Development seed collection system.

The cash income that farmers get from jatropha seed collection is thus relatively low, but it is seen by farmers as supplementary income; the work involved does not take time away from food crop farming activities, even though it reduces the time available for leisure and/or other non-remunerated activities such as tasks relating to household reproduction. The opportunity costs are also low, given limited alternative livelihood activities beyond food crop and coffee farming in the local jatropha-growing areas visited. For these reasons, and especially because the income is low, men in the focus groups reported that jatropha is mainly perceived as a women's crop. Even though men increasingly now help with picking the seeds, it is usually the women who dry the seeds and take them to the collection sites and receive the money. They use it to pay for small household items which they would normally be responsible for the control and purchase of in any case, such as bars of soap at TSh 500 each (US\$ 0.36), cooking oil, kerosene and so on. Some male farmers said that if prices were higher they would put more effort in, as they do for coffee, but because of the low returns they were happy to leave jatropha to women.

Nonetheless, as noted above, the majority of Diligent's 70 collectors at the time of the fieldwork were men. This is partly due to the weight of the seed sacks when full, but also to the higher returns on being a collector than an ordinary jatropha farmer which make it more attractive for men to be involved in this business as collectors than ordinary farmers. For example, some collectors have set up small shops at their collection sites, at which farmers spend some of the money they have just received from the collectors for their seeds. Some women collectors reported needing to use bicycles or donkeys to carry out their work, while some men reported helping their wives who were collectors with transporting the seeds from more distant farmers to the collection site on their motorbikes, thereby making married women collectors potentially dependent on their husband's support to pursue this income-generating opportunity.

Concerning training, most of the jatropha farmers in the focus group discussions had not received much training on jatropha production, although several collectors had attended some of the above-mentioned JP TL seminars. In terms of inputs, Diligent has recently distributed 1.1 million jatropha seedlings to farmers through Partners for Development, to extend hedge-planting and increase total jatropha production, but farmers mainly rely on extending their hedges by themselves. Some farmers reported having been given some training on making jatropha soap, but they considered the training useless because they lacked the equipment to make the soap themselves. However, as noted above, they were all interested in acquiring and using the improved cooking stoves, as well as in any other opportunities to use the by-products of the jatropha oil for domestic and commercial use.

Other gender and equity implications of this market for jatropha seeds through Diligent emerge succinctly in the following comments from the focus group discussion with jatropha farmers:

"I feel good because I can get money now for buying exercise books for school without asking my father" (young girl still at secondary school, living with her father after her mother died).

"I would like the prices to be higher but I am happy to have Diligent here because now I have got somewhere to sell my seeds and get something for them even if it is small" (middle-aged man).

¹⁰ Comparisons with the national minimum wage are not applicable here as that applies to formal wage employment while farmers in the focus groups were reporting the wages they receive from undertaking informal casual labour on each other's farms.

“I am happy to have Diligent here because there is now less fighting in our family with my wife, as she gets money from the jatropha seeds which cater to her small needs so other money coming into the family can be saved for other things” (old man).

“I would like more money for the seeds, or maybe to be given jatropha soap or jatropha oil as part of our payment, so we can get practical things” (old man).

“I am very happy to have Diligent here as now there’s another crop I can get money from and I am happy to have that possibility to support my children” (young widow).

In sum, as these comments suggest, jatropha seeds are seen as bringing the benefit of a supplementary source of cash income to farmers, particularly women farmers because of men’s present reluctance to pick the seeds and their willingness to leave jatropha as a women’s crop. Some focus group participants noted that this could have a positive effect on household food security as the jatropha hedges are not planted on land used for food crops but instead provide a source of cash income that can be used to buy extra food when maize harvests are bad; jatropha seeds also provide extra cash income to help with school fees. Faida-Mali confirmed that this is the case particularly for families headed by women. Yet focus group participants were unanimous that their overall time spent on farming has increased because of jatropha harvesting, and their leisure time reduced, and for what is still a relatively low return. The fact that women were able to benefit directly from the crop, and use the cash income for small household items that they are normally responsible for buying, is testament to the low returns, and it is to be expected that if cash returns were higher, the crop would generate more interest from men. This could have a negative impact on household dynamics – increasing the fighting that one of the above-quoted focus group participants reported having reduced if women try to hold onto this new source of cash income for themselves. It is interesting, therefore, that it was noticeably the men within the focus groups who asked for prices of jatropha seeds to be higher and to be supported by government-set minimum prices to incentivise them to expend more effort on this crop.

3.2 Multiflower Ltd

Multiflower Ltd was originally founded in 1995 with three Dutch and Tanzanian shareholders. Vegetable seeds were imported from Holland and sold throughout Tanzania, while flower seeds began to be produced with outgrowers in Tanzania for export to Europe. In 1996 the company began producing flower cuttings in greenhouses on its factory site in Arusha town, also for export to Europe, and Arusha Cuttings was formally started as a division of Multiflower Ltd in 1998. In 2001 the greenhouses were expanded and another division, Greenstars, was established to produce borderplant cuttings for export. In 2005 a third division, Mkulima Seeds, was set up to deal with imported and locally produced vegetable seeds for the local market. The company has been through a number of other transformations and changes of ownership and business plan, but by the time of the fieldwork these three divisions were the three main strands of the Multiflower business.¹¹ Since 2007, Arusha Cuttings and Greenstars have rented their greenhouses to Multiflower, which became the sole direct exporting entity, and in 2008 Mkulima Seeds stopped importing vegetable seeds and began concentrating solely on production of vegetable seeds with outgrowers.

By June 2011, Multiflower had formal outgrowing contracts with around 5,000 flower seed farmers and about 150 vegetable seed farmers. All the vegetable seed farmers – about 5% women to 95% men – were based in Arusha region, while 3,651 formally contracted flower seeds outgrowers were based around Arusha, Kilimanjaro and Manyara, among whom 2,850 (78%) were men and 801 (22%) women. Table 1, below, gives the precise figures for the areas visited, which had an overall ratio of men to women of about 2.8.

¹¹ Multiflower was also one of the original founders of Diligent Tanzania Ltd but sold its stake in that company in 2008 in order to concentrate on its core horticultural activities.

Table 1: Number of flower seed and vegetable seed outgrowers by sex and area

Areas	Total	Men	Women	% Women
Kiserian (flower seeds)	95	64	31	33%
King'ori (flower seeds)	189	137	52	28%
Lepurko (flower seeds)	107	81	26	24%
Maweni (vegetable seeds)	41	36	5	12%

In addition, Multiflower Ltd employed a total of 644 workers at its factory site in Arusha town at the time of the fieldwork – 317 permanent workers (of whom 52% male and 48% female), 207 ‘specific’ workers on rolling 1-year contracts (of whom 19% male and 81% female) and 120 ‘transient’ workers on a casual labour basis (of whom 36% male and 64% female). Overall, some 39% of the total workforce was therefore male and 61% was female, but with the majority of women employed under more precarious employment conditions compared to men.¹²

The following three sub-sections separately present the analysis and findings from the research at Multiflower into labour and income-generating opportunities for, respectively, flower seed farmers, vegetable seed farmers and wage workers at the factory site.

3.2.1 Flower Seed Farmers¹³

Multiflower’s flower seed business is the oldest part of its operations and by far the biggest. The company has 80 different clients, mainly in Europe, to whom it sells over 120 different varieties of seeds. These are sold in small packets in the spring in supermarkets such as Tesco in the UK, or shipped to the USA. All the seeds are for annual open-pollinated flowers, for which Multiflower has 25% of the world market.

Some of the participants in the focus group discussions with flower seed farmers had been Multiflower outgrowers since the beginning (in 1995), but the majority had taken up flower seed farming in the past five to eight years. The flower seed business is structured around formal outgrower contracts signed each season with individual farmers, who agree with Multiflower’s field officers how much of their land to grow flowers on, which varieties to plant, and at what price for the expected output. The outgrowers sign a contract with the company and get the seeds in January-February before the rain starts in March-April. Multiflower tries to give farmers different varieties of flowers so that their individual risk is spread – some varieties are more labour intensive while others less so, and different varieties do well in different climatic conditions. Multiflower’s field officers check on the outgrowers every two weeks to estimate the harvest and advise on and supervise them in plant care. Field officers are employees of the company and each has his or her own zone, consisting of two or three adjacent locations with about 400-500 outgrowers in total. Additionally, there are farmers’ representatives in each location organizing around 50 individual outgrowers each; they are experienced Multiflower outgrowers who support the field officer and get benefits such as special loans to buy things like motorbikes and houses. The farmers’ representatives are also paid to attend trainings at the factory site in Arusha and have an important responsibility for passing on the information and training received to the outgrowers in their area.

The company uses outgrowers because flowers are a labour-intensive crop and need isolation by colour within the same variety; hence it is difficult to cultivate them on plantations in a commercially viable way with the large number of varieties that Multiflower produces. Sometimes the outgrowers employ one to three casual labourers in addition to about five family members working on their flower farms, depending on the

¹² By way of comparison, 75% to 80% of workers at another Arusha-based horticultural company, Hortanzania Ltd, were women. This company said that women at Hortanzania work mainly in production of roses and green beans, as “*they are more careful*” and these are “*products that are sold on the looks*”, whereas casual workers who are paid by the kg and hired for harvesting coffee and beans are mostly men because “*this is hard work*”.

¹³ A sample individual case history of a young married woman flower seed outgrower from Lepurko is given in Annex 5.

size of cultivated area. Some outgrowers have $\frac{1}{4}$ or $\frac{1}{2}$ an acre of flowers, some much more, but contracts are signed even with outgrowers with smaller pieces of land.

Flower seeds are harvested during the dry season, typically in July-August, at the same time as the main maize and beans harvest. Then in September the outgrowers take the seeds to the company where they are checked for quality, cleaned, packaged, and finally shipped to Europe. Outgrowers had been paid three months after delivering the seeds in the past, but this payment system was being changed at the time of the fieldwork so that they will in future get half the payment when they hand over their seeds to Multiflower in September and the rest three months later. The system of delayed payments is necessary because the quality control process for the flower seeds is lengthy (requiring testing of germination rates), and because of cash flow issues for the company, which only receives payment from its clients in April while taking delivery of seeds from its outgrowers the previous September. However, some outgrowers whom the company has a longstanding relationship with, or who agree to plant flowers that are more difficult to grow, were already getting 25% of the payment during harvest.

The final payment that the outgrowers receive also varies according to transport and cleaning costs, and the costs of any inputs supplied, such as pesticides, are also deducted. The latter costs are minimal as Multiflower uses very few chemicals, on only around 1-2% of flower fields.¹⁴ In addition, the company absorbs the cost of up to 20% of seeds that are rejected by clients, while buying all the seeds that the outgrowers produce even if they exceed the estimated output agreed in the contract. Once the harvest is delivered and the farmer is fully paid, the contract expires and new contracts are signed early the following year for the next growing season.

Multiflower's big orders come during December and January and this is when prices for every variety are negotiated with its clients for the season ahead. There are also opportunities for a second minor season (planting in September) on land that is irrigated, and orders are also taken for this. Thus Multiflower knows in advance the price of each variety and the quantity needed for its clients, and can bargain with its outgrowers to achieve the required supply. The outgrowers can then decide what they want to grow based on the prices already agreed with the clients, but generally, the higher the price, the more labour will be required. Hence it is because of this that the company sometimes has to ensure outgrowers take a mix of flower varieties, including both simple (lower revenue) and more labour intensive (higher revenue) ones. When setting prices, Multiflower also looks at the prices of food crops; if maize prices are going up, it increases the prices of flower seeds as well to keep them competitive. Flowers earn outgrowers more money than selling maize if rains are good, but when rains are bad and food prices are high, the company has to incentivize outgrowers with better prices to keep them growing flower seeds.

Six focus group discussions were held with Multiflower's flower seeds outgrowers, two in Kiserian and two in Mareu, both in Arumeru district, and two in Lepurko, a more remote village in a drier area in Monduli district inhabited by the Maasai. They all cultivated flowers in addition to other crops, both food and cash crops, as a complementary source of income; as they need much less water, flowers are the main source of cash income for buying food at times when maize harvests are bad because of drought. Unlike the Diligent jatropha case already discussed (and the Multiflower vegetable seeds and TAHA fresh vegetable cases discussed below), an important difference for Multiflower's flower seed outgrowers is that most were using land for this activity that they had previously used to farm food crops. Some had rented-in additional plots of land to continue growing maize, but women in Kiserian and Lepurko pointed out that for them cultivating flowers meant having less land for maize and thus for food overall as it was not possible to rent additional land due to a lack of resources (in Kiserian) and a lack of availability of land to rent (in Lepurko).

¹⁴ Pesticide use is a hot issue in flower production and Multiflower is very conscious of upholding good practices in this regard. The instructions that come with the pesticides Multiflower uses direct the farmers on safe use and alert them on keeping the pesticides away from children and the sun. These instructions are in small print on the back of the containers and are often in English, which most people do not read or understand, so farmers are supported by field officers in their safe use. However, Multiflower claims that even when they have them, outgrowers do not always wear masks and often leave empty bottles of pesticides in the fields; the company was therefore actively encouraging farmers to bring back empty bottles before getting new ones at the time of the fieldwork.

Multiflower Ltd does not have specific strategies to target women farmers, but the company prefers to have contracts with women *“because they are doing the job of farming”*. Of those women who participated in the focus groups, some were outgrowers with contracts in their own names, while a few were farming through their husbands and did not have their own separate contracts. However, men were supportive of their wives getting separate contracts as this was perceived as a way to

“get more money or support because everyone with a field can be rendered a loan that will help in obtaining basic needs or in emergency cases, as each contractor can separately ask for a cash advance”.

In polygamous marriages, it is common practice for each wife to get a plot of land that she can farm; thus, these women were more likely to be contracted independently as outgrowers with Multiflower. Contrariwise, regardless of the marriage type, one contract cannot be issued in the name of both spouses and the company only makes payment to the person who has signed the contract. This is because Multiflower experienced problems with payments getting to the contract-holder when it used to pay one spouse on behalf of another. However, in case of problems such as sickness which would prevent the contract-holder from going to Multiflower in person to receive their money, the contract holder can request the village chairman to authorize their spouse to receive payment on his/her behalf and make a follow-up to ensure the money ends up with the right person.

Women generally preferred their own contracts because, as one woman in Kiserian stated

“having a contract in my name feels good as the contract gives me security. It is easier to get loans from friends because they know you have a contract with Multiflower and you will get income”.

In contrast, a woman in Mareu who shared land with her husband and did not have her own contract pointed out that

“my husband gets all the money so I have to ask him for money...the company cannot give me anything, neither seeds nor money, because I am not the contractor, although I am the one farming flowers in the family”.

On the other hand, there were also cases of women with contracts who felt the burden of having to negotiate with the company on issues such as dirty or ‘rotten’ seeds, while the women in Kiserian reported that they were getting seeds from the field officer but without a formal contract. Multiflower verified that this latter was not the case; all outgrowers sign contracts when they receive their seeds, although a copy of the contract is given to them only at harvest time.

For women with contracts in their own names, this was not necessarily more likely to correspond with having more decision-making powers within their household, especially with regards to land use. For instance, the Maasai women in Lepurko were not fully free to decide what to plant on their own fields as their husbands would often have told them to become Multiflower outgrowers in the first place; they also had to consult with their husbands on how to spend the cash income received, which largely went on paying school fees for their children. More generally, women in the flower seed outgrowers’ focus groups who did not have their own individual contracts claimed that they decided jointly with their husbands on matters relating to land use and income, while men in all the focus groups claimed they consulted with their wives on all decisions regarding land. As one young man in Mareu elaborated, *“land cannot be sold without asking the wives; if this happens the wife can take the husband to court”*.

Regardless of whether or not they had a formal contractual relationship with Multiflower, the women outgrowers were generally doing most of the labour either alone or together with their husbands, with the exception of spraying pesticides which was considered solely a man’s task by both men and women focus group participants. Digging, planting and weeding were generally done together, or alone if the husbands had other livelihood activities of their own, while flower-picking was specifically a woman’s task. In some instances where wives had separate flower fields, husbands and wives were farming separately but wives

would also help with the husband's field once they had finished work on their own. One man whose wife was very sick farmed both his and her separately-contracted flower farms completely by himself.

Because tending flowers can take up to 12 hours a day during the growing season, overall farming activities for the women had generally increased considerably, leaving almost no time for other activities and sometimes causing them to miss meals. Nonetheless, most women participants in the focus group discussions welcomed the possibility of growing flowers because it meant having a cash crop, which can be useful when maize harvests fail. However, most outgrowers complained that flower seeds were no longer as profitable as they used to be because life has become more expensive. The delayed payment system was also a very debated issue. Most outgrowers felt that they were not getting the money when they most needed it, with women specifically complaining about not having the cash to pay for school fees at the required time.

As noted above, casual labour was used by flower seeds outgrowers both for flowers and other crops depending on need. Casual labourers are usually farmers from the same area who provide work on neighbouring farms when they are finished working on their own land. These labourers can be either men or women and are paid equally for the same work. However, men are more likely to use casual labourers than women, and they use it for other crops than flowers because flowers are more delicate and require more personal attention. On the other hand, all women flower seed farmers use male casual labourers for spraying pesticides in the few cases where that is required. Casual labourers themselves are not keen to work with flowers in general as some varieties can be poisonous and cause problems with allergies such as hayfever. This, compounded by the fact that flowers are so labour intensive, explains why casual labourers ask to be paid more for flowers than other crops, with wages going up to TSh 30,000-40,000 (US\$ 20-26.60) per acre as opposed to TSh 20,000 (US\$13.33) per acre for work on maize. Furthermore, problems such as allergic itching, swollen eyes and skin rashes during harvesting were reported by most outgrowers, who lamented not having been provided with free masks, gloves or boots.

Only two among all the flower seed outgrowers in the focus groups, both of them men, had attended a formal training session at the Multiflower factory in Arusha town. These were the farmers' representatives who were trained on various aspects of growing flowers and also on contractual issues as part of their responsibilities, as noted above. More commonly, training is provided by the field officers once a year when the new seeds are brought to the outgrowers, usually to a group of outgrowers in an open space in their village. These are not formal training sessions but rather an extension service incorporating instructions on how to plant, weed, harvest, treat diseases and take care of the flowers, followed up by on-site advice and monitoring by the field officers.

In terms of their overall perspective on this income-generating opportunity, the longer that outgrowers had been with Multiflower, the more tangible the benefits they were able to see in terms of cash income and livelihoods. Flower seed outgrowers gave positive feedback about the company and appreciated the stability of the contract system. When asked about other agricultural investments, they welcomed the opportunity of more competition among companies, thinking they could benefit through getting higher prices from Multiflower. However, this is partly because they already have direct experience of other companies offering them higher prices for their flowers which resulted in Multiflower increasing its own prices to help keep them loyal.

3.2.2 Vegetable Seed Farmers¹⁵

As noted above, vegetable seed production is Multiflower's newest activity. It has arisen in response to shortages on the international market of open-pollinated carrot, cabbage, okra and cucumber seeds, as more technical and expensive hybrid seeds, less popular with African farmers, have taken over. The business is growing fast and the company has many requests from countries in West Africa, including Nigeria, and also the USA, although production was not yet fulfilling the Tanzanian market at the time of the fieldwork.

¹⁵ A sample individual case history of an older married man vegetable seed outgrower from Maweni is given in Annex 5.

Physical production began in the 2010 season, and by the 2011 season about 150 outgrowers had signed contracts and planted crops. They were mainly growing cucumbers, tomatoes and okra for local sales. Some of the vegetable seed growers were flower seed growers with Multiflower before, who switched to vegetable seeds, while some were still growing flowers as well.

Differently to the contracting process for flower seeds, the company estimates annual production of vegetable seeds based on the number of outgrowers who have signed contracts and the climate and soil conditions on all their farms, and then sets sales targets from that. The seeds will keep for two or three years, so the company can buy more if the outgrowers produce more, and it stores their seeds for later sales on the site in Arusha. The vegetable seeds outgrower contract shows the number of kg of seeds per acre that the company expects the outgrower to produce, and the price, which is agreed beforehand and paid in full when the outgrowers deliver their seeds. The vegetable seeds contract also sets out various costs, for example that of hiring equipment for extracting the seeds in the cases of tomatoes, and what germination rate is needed for the seeds to be accepted. Multiflower provides chemical pesticides and fertilizers and deducts the cost of them from what they pay for the seeds at the end. The average price of the wholesale product for vegetable seeds is TSh 1-1.5 million per acre (US\$ 666.67-1,000), compared to TSh 350-500,000 per acre for flower seeds (US\$ 233.33-333.33) and TSh 200,000-300,000 per acre for maize (US\$ 133.33-200).

Dedicated vegetable seed field officers visit the outgrowers at least once a week during the main growing season (March-April to October) and sometimes more often; vegetables are more delicate than flowers and thus need more intensive monitoring and support from the company. Each outgrower has one or two varieties, which have to be grown on land far apart – not intercropped or next to each other. Vegetable seed production is also very high input – it is more capital intensive than flower seed production and requires fertilizers and more pesticides as well as irrigation. For this reason, vegetable seed outgrowers tend to be richer. Some have piped water on their land and others have drainage channels; most also use tractors for preparing their land.

These factors help explain why the vast majority of Multiflower vegetable seed outgrowers are men. The few women vegetable seed outgrowers generally do not have husbands (usually being divorced or widowed), or their husbands are busy with other livelihood activities of their own. Some of the male outgrowers are also businessmen or teachers, and this is an extra income-generating activity for them, while other men with contracts are commercial farmers who grow other crops (such as maize) for sale too.

All 12 of the farmers in the two vegetable seeds focus groups (five men and seven women) had formal outgrower contracts with Multiflower. Some of them had switched to vegetable seeds from flower seeds while others had been previously cultivating vegetables for sale in the local market. As one man explained, *“the market is not reliable and you can take the vegetables to the market and not be able to sell them. So Multiflower is better as the market is guaranteed”*. The main reason for switching from flower seeds was that prices for vegetable seeds are higher. A couple of outgrowers, including a separated woman, had had small businesses before, but went into farming after hearing about the opportunities presented by Multiflower. One man had been in mining, while another had livestock but moved to vegetable seeds production as he saw that *“all those who joined had better lives”*. Furthermore, although growing vegetables for seeds is concentrated between March and October, outgrowers also get the choice of a second season with the company or of growing their own fresh vegetables for sale and/or consumption from September to December. In general, all these farmers were relatively well off and had enough resources to be able to invest in vegetable seeds production.

Importantly, all of the outgrowers in the vegetable seeds focus groups, with the exception of one woman, had rented-in land specifically for the purpose of growing vegetables for seeds. This is because, as noted above, vegetables require a lot of water so the fields need to have irrigation canals or be close to water. However, men’s fields were considerably bigger than those of women. Among the men in the focus groups, one had 3 acres devoted to vegetable seed production plus an additional acre for maize, and all the others had from 4 acres up to 8 acres for vegetables in addition to an average 3.5 acres for maize and beans. Among the women, one had 3 acres of owned land while the rest had less than 2 acres of rented land for vegetables and less than 1 acre for maize. The cost of renting-in land for growing vegetables is twice as much as it is for

growing maize – TSh 100,000 (US\$ 66.66) per acre as opposed to TSh 50,000 (US\$ 33.33) per acre at the time of the fieldwork – because landlords know that vegetables are high value crops and sell for higher prices on the market. In terms of gender equity, however, this creates a barrier to accessing this business for women who generally have fewer resources than men.

Vegetables also create a lot of additional work even for those women who do not have contracts themselves. Wives work in the fields alongside husbands who are vegetable seed outgrowers and also supervise casual labourers, for whom they have to prepare meals twice a day. There was little division of labour in the field, except for spraying which is done by men and fetching water which is a woman's chore. One married woman further elaborated:

“There is more work in the farm, at least 8 hours per day, in addition to all household chores and not enough time to eat. Sometimes I have to milk the cows before going out in the field while my husband is still sleeping. The children can help in the field but only where they are not in school. Before the ward schools opened you could find some girls hanging around who could help with household chores but this is no longer the case. The husbands don't stay in the field with us the whole day. In the afternoon they go off to other activities (village activities, water meetings, church meeting and social services). He may be in the field two or three days per week but doesn't stay till evening unless perhaps if a child is sick and I have to take them to the hospital.”

Another insight came from the men in the focus groups, who shared that their wives were reluctant to take up vegetable seed production because of the perceived high risk of the investment and the money needed for production costs which could be lost if the harvest fails. Male vegetable seed outgrowers thus had to insist and explain to their wives what the advantages would be. On the other hand, the bulk of the work is concentrated in the first three months, where preparation, planting and weeding take place, while afterwards the activities reduce and outgrowers can work less while they wait to harvest the crops.

All of the participants in the focus group discussions, men and women, used local casual labourers for vegetable seed production because they all had relatively big fields. Some workers were employed for irrigating on a permanent basis and paid by the season, while others were day labourers who were employed as needs arose for weeding and planting both vegetables and food crops such as maize and beans. In the cases of the single women, these employed a permanent male worker to help them for an agreed percentage of the income from the seeds. Concerning training, a third of the vegetable seed outgrowers in the focus groups discussions, all men, had attended a formal workshop at Multiflower's factory site in Arusha. These workshops are organized twice a year. The women, instead, received 'on the job' training from their field officer and reported having learnt new skills that can be applied to other vegetables as well.

In sum, vegetable seed production seemed to be a profitable business providing good cash income to Multiflower's outgrowers. One man said he was able to buy a motorcycle from the first year's income; another that he had been able to build a house. The women as well, although to a lesser degree, reported getting “a lot of money, if there is enough rain, and this helps with school fees and to buy food”. It was also noteworthy that all of the outgrowers in the focus group discussions saw this business as an opportunity for further personal development which would mean either leaving agriculture in the future to go on to do something else (such as opening a hardware shop), or expanding and diversifying this very business (such as through using tomato seed by-products to make tomato paste as well). The overall level of satisfaction with Multiflower was therefore generally high for these outgrowers. Some of the women had been contacted by other companies who offered them higher prices but they preferred to stay loyal to Multiflower “because things are more transparent” with the contracts and there are no intermediaries such as agents. However, the main gender issues with vegetable seed production remain in the barriers for women to access it, linked to their lower endowments of land and resources, and the culturally-linked gender divisions of labour and increased burdens within families which arise for women with this type of agricultural investment.

3.2.3 Wage Workers at the Multiflower Factory¹⁶

As noted above, Multiflower also produces flower cuttings for export in around 5ha of greenhouses on its factory site in Arusha. The cuttings are sent mainly to Europe where they are potted in soil and sold as seedlings. Varieties include Chrysanthemum, Belgian Gardenmums, French Geraniums, Lavendula, Poinsettias, Carnations, Spathophyllium, Pot Geraniums, Osteospermums and Fuschias. As also noted above, 61% of Multiflower's 644 wage workers at its Arusha site are women. Of the total workforce, 49% are permanent employees (staff), 32% are temporary (specific) workers who have annual renewable contracts and 19% are transient workers (casual labourers) who may be hired for one, two or three months. Female participation is higher among specific (81%) and transient (64%) as opposed to permanent workers (48%).

Specific workers are paid according to how much they cut; the pay can be up to TSh 7,000 (US\$ 4.67) per day but not below the national minimum wage. The basic monthly salary for permanent workers depends on their job but is not below TSh 120,000 (US\$ 80).¹⁷ For harvesting it ranges between TSh 130,000-140,000 (US\$ 86.67-93.33), plus a bonus of TSh 25,000 (US\$ 16.67), attendance allowance and pension. For other more skilled jobs, such as packing and quality control, the monthly pay is between TSh 140,000 (US\$ 93.33) and TSh 160,000 (US\$ 106.67), plus a bonus which totals 1.5 or 2 times the average bonus of all workers. All monthly salaries are guided by a CBA that the company signed with its workers' representative committee in 2010. This is Multiflower's own CBA and not the one developed by TAHA, TPAWU and ATE and discussed in Section 2.1.2 above. This is because at least half of all employees should be affiliated with TPAWU for that CBA to apply, yet Multiflower had only two workers who were union members at the time of the fieldwork. Some of the women wage workers in the focus group discussions were sceptical of unions as they did not think they could help workers in private companies, although Article 22 of Multiflower's CBA does "*strongly recommend*" the workers to join the TPAWU union; once ten workers have joined, TPAWU will be able to open a branch on site.

Multiflower's permanent staff and specific workers get pensions, leave allowances and maternity leave. In addition, permanent workers can join and get loans from a registered Savings and Credit Cooperative Society (SACCOS), whose creation Multiflower facilitated; the company pays for a permanent staff member to work full-time in the SACCOS but it is run by the workers with its own committee. Transient workers, who are not taxed, have access to overtime and a bonus system but not to other benefits. Multiflower has also provided the capital to build a private primary school with adjoining nursery near the factory site, to which they have been adding two rooms each year. Around 200 of the children attending the school are workers' children, accounting for 33% of all enrolment, while the remainder are children from the local community. Multiflower workers pay a subsidized fee of TSh 100,000 (US\$ 66.67) per year for the first child and TSh 50,000 (US\$ 33.33) for the second child, as opposed to the TSh 1 million per year (US\$ 666.67) that private schools normally charge in Arusha; fees for children from the community are higher than those for workers' children but also subsidized.

Participants in the focus group discussions at Multiflower's factory site included both single women (mostly divorced, separated or widowed) and married women. All but two were permanent staff who had been with the company from between three and 16 years, when it was first set up; the others were temporary (specific) workers who had been with the company for four and six years respectively. Among the single women, all had started as transient (casual) workers. In both the focus groups the women held a range of different positions, including cleaner, cook, harvester, picker, planter, packer, quality control, evaluation and analysis, and supervisor.

The long term relationship with the company that women wage worker focus group participants had corresponded with an overall high level of satisfaction with Multiflower. Multiflower was described as "*very caring*" and the women explained that "*this is why we have been here for so long*". As described above, the horticultural sector as a whole plays an important role in employment creation in Northern Tanzania; the

¹⁶ A sample individual case history of a single divorced woman wage worker at the Multiflower factory is given in Annex 5.

¹⁷ The national monthly minimum wage in the agricultural sector is TSh 70,000 (US\$ 46.67).

sector is highly competitive and this benefits the workers who have a wide range of opportunities to choose from. Although Multiflower does not provide specific technical training beyond the basics needed to perform the tasks required for the job, the women in the focus groups reported having been able to acquire new skills, for instance in harvesting, which they could use at other companies if needed. Yet their general feelings about agricultural investments confirmed their level of affection for Multiflower in particular, as focus group participants said they “*would like other companies to help fellow women and casual workers to get the same benefits as us*”.

At Multiflower’s factory, women get the same salary as men for the same kind of job, for instance in cooking which was a specific example provided. However, a gender division of labour exists in the factory as mainly women work in harvesting and planting while only men spray pesticides. Although they could not give a clear explanation for this, the women in the focus group discussions indicated that one reason for lack of male participation in harvesting is that men cannot physically bend over for long periods at a time. This partially confirms the findings of the TPAWU research project described earlier, which highlighted that women in horticulture generally perform jobs that involve bending and long standing, which are usually the lowly paid ones (TPAWU 2011, p.28). However, culture and customs were also reported as accounting for many gendered divisions of labour.¹⁸ Interestingly, according to focus group participants, men are hired largely as transient (casual) labourers because most of their work is seasonal. However, official data provided by the company indicate that the majority of the permanent staff are males and the majority of transient staff are female – the explanation of the company being that women are mostly working in the greenhouses where work, including sowing, weeding, cutting and pinching tasks, is more seasonal, while men work in irrigation, in the workshop and as drivers, all technical jobs that are not seasonal. This contrast between perceptions and official data seems likely to be a result of the physical segregation between workers across much of the factory site (see below).

The women wage workers reported that they mostly did not hire any domestic workers to help them at home, that their children have to stay home by themselves after school and that the women have to take care of all household chores after work. Some married women reported being stressed from having everything on their shoulders and no help from their husbands who do not “*interfere*” at all with household activities like cooking. However, decisions about how to spend the cash income from the women’s work at Multiflower were reportedly taken jointly with their husbands and it is saved and shared together. Having an income of their own therefore gave the married women better control of its use and improved powers over intra-household decision-making about money in general.

Most of the divorced, separated and widowed women said they had farmed for food in the past, but were not farming anymore (since becoming single) because they no longer have land and cannot afford to rent it or pay for casual labourers to help them farm; for the same reason most do not have the possibility to become outgrowers for Multiflower. Among the married women, only one was farming before while others had small businesses or were wage workers or casual labourers elsewhere in the horticultural sector. Generally all the women in the focus group discussions agreed that they are now better off than before because their job at Multiflower allows them to buy food on credit even when they do not have enough cash, and this is true especially for single women. Some women also pointed out that having a formal job allows them to send children to school and “*have more pride in what we do*”. In the case of married women, the extra cash income can go into buying “*more expensive things that would not be affordable*”, as one woman put it. The company also has a store run by the SACCOS where the workers can buy small household items and furniture on credit.

The possibility to access loans through the SACCOS had both positive and negative effects for the women in the focus groups. The SACCOS provides members with considerable opportunities, first and foremost that of buying a house; at the same time, however, this can take them, especially single women, into a vicious cycle of debts and loans which are never fully repaid. The tendency is to get very big loans to buy houses or

¹⁸ The respondents of the TPAWU research had said that according to culture and customs men cannot perform work that involves bending. The male member of the research team said only that he personally cannot physically bend over for a long time, but refused to attribute this to custom. Similarly to Multiflower, most workers in the Hortanzania greenhouses were also women.

land, making the repayments in the form of deductions from their monthly salaries difficult to afford. The outcome was a perception among the focus group participants that they do not get enough money to meet their daily needs. On the other hand, the women all commented positively on the openness within Multiflower that allows them to talk to their supervisors in case of problems with a sick child or an antenatal visit, for instance, and it is unlikely that requests for time off in these cases are denied. In terms of other benefits, the possibility of sending their children to the company school was also viewed as a major benefit by permanent workers.

Participants in these focus groups were also asked specifically about sexual harassment, as this had been highlighted as being a major problem in the horticultural sector in TPAWU's research. However, this did not seem to be the case at Multiflower, as the company physically segregates workers by using female supervisors for women workers and male supervisors for men workers. The women wage workers said that most supervisors are women at Multiflower and the few male ones are older men who have "*outgrown inappropriate behaviours*". They also pointed out that the company thus acts as a watchdog to prevent such behaviour from happening; one supervisor reported that she has never seen anything happen in terms of sexual harassment but that if something did, she would immediately report it to the higher level management.

The focus groups discussions with Multiflower women wage workers and key informant interviews at TAHA, TPAWU and Hortanzania Ltd between them suggest that the horticultural sector in general offers good formal employment opportunities for women. Gender divisions of labour do exist but are an effect of higher rates of female participation and cultural and traditional attitudes that require time to change. Workers in horticulture, particularly women, have benefited from the combined effects of the two TPAWU projects described earlier, the advocacy of TAHA, TPAWU and ATE which promoted the adoption of CBAs more widely, and competition among companies. This latter requires meticulous and accurate workers to produce outputs measured in terms of high quality, nice-looking produce for export, and translates into a better working environment, better conditions and a bundle of benefits that are gender sensitive.

3.3 The TAHA-Supported Group-Based Approach

TAHA, the Tanzania Horticultural Association, is a 100% private sector member-based apex organization, founded in 2004, with the core mission to promote and develop the horticultural sector in Tanzania. TAHA works across the five different value chains in the horticultural sector: fresh flowers, fresh fruit, fresh vegetables, herbs and spices, and seeds (flower, fruit and vegetable). The organization represents big producers, processors and exporters, as well as different service providers such as dealers, consultants and some government agencies, and farmer groups, associations, co-operatives and some individual small-scale farmers. TAHA's main areas of work (for which they receive some donor funding) include lobbying and advocacy for the sector, trade promotion activities, technical training and support services to members, and information dissemination activities; there are also separate off-shoots providing fresh handling and trucking services which are run as private companies on a fully commercial basis.

One of TAHA's main aims is to link different people across the industry. To this end, it supports small farmer groups wishing to enter the horticultural industry in a structured way, and it has been giving particular emphasis to supporting women in becoming more formally involved in the horticulture sector, in order to improve their access to opportunities that are often more readily and easily taken up by men. Thus, a group or farmers' association may approach TAHA to ask for advice and support in their activities, and TAHA will look at different markets and opportunities and advise them on which would be best for them and how to begin production. The organization will also provide or arrange initial technical training for the group members and facilitate meetings and contractual arrangements with traders and buyers to give them a defined market for their produce.

One such group is the Lida Women Group in Ilboru ward in Arusha town. This women-only group had 45 members at the time of the fieldwork and had started as a mutual savings group, whereby each member

contributed TSh 5,000 per month (US\$ 3.33) for 18 months so that the group could register as a local NGO. At that point, having seen that some local people were getting a good income from selling green beans to a Kenyan-based company, Homegrown, the group decided to approach TAHA to ask for support in developing horticultural activities of their own. TAHA has since facilitated negotiations and contractual arrangements for the group to use some of the land of a big fresh flower production company, Arusha Blooms, that was diversifying its activities as a result of the global financial crisis at the time of the fieldwork. Instead of paying rent for the use of their land, the Lida Women Group will give them part of their green beans crop and receive cash income for the remainder directly from Homegrown, which has a contract with Arusha Blooms to buy fresh vegetable produce from them for export. As part of the deal with Arusha Blooms, the women will also receive relevant training in green beans production to ensure they achieve high quality produce.

In addition, TAHA has advised the Lida Women Group to simultaneously take up mushroom farming and has facilitated contractual arrangements for their mushrooms to be bought by Moshono Agroforest Company, in an open and transparent negotiation process in which several members of the group took part. Moshono has provided training in mushroom-growing and will provide the starter seed bags to the group at TSh 2,000 each (US\$ 1.33) and pay TSh 3,000 per kg (US\$ 2) for each of the 3 kg of fresh mushrooms expected to be produced from each bag, entailing a cash profit to the Lida Women Group of TSh 7,000 per bag (US\$ 4.67) before labour and other production costs are taken into consideration. TAHA also helped the group negotiate with a local landlord (one of the group member's husbands) for a 6-month rent-free period on a 2-year lease on the site of a small piece of land where they have started building a mushroom shade. The costs of the building materials are being covered by TAHA while the women group members provide the unremunerated labour to construct the shade.

TAHA has also been working with two vegetable-growing groups in Nduruma village, Arumeru district, which were at a less advanced stage than the Lida Women Group in terms of group organization and business development at the time of the fieldwork. These groups, the Minanko Group and the Lukusangire Group, with 30 members each, are mixed groups of women and men. Both were planning to start up production of green beans and TAHA was supporting them in their search for suitable pieces of land and trying to link them to buyers.¹⁹

Four focus group discussions were held with women farmers taking part in these TAHA-supported vegetable-growing groups, two in Ilboru and two in Nduruma. In Ilboru participants were separated into two groups largely by age (up to 40 years old and over 40), and in Nduruma they were separated by marital status. However, the same broad findings emerged from all four focus group discussions.

Similarly to the Diligent *jatropha* collection and Multiflower vegetable seed production cases discussed above, all the women farmers in these TAHA-supported vegetable-growing groups were planning to undertake this income-generating activity in addition to their existing and ongoing farming activities. Gendered divisions of labour in farming were also before as now, with women largely responsible for food crop production and tasks such as weeding, and men mainly responsible for production of cash crops such as coffee. Families of women in the focus groups depended heavily on their food crop production, especially in Nduruma, as well as a variety of other small businesses and income-generating activities such as selling clothes, making and selling cooked food, home selling goods for direct marketing companies, keeping small numbers of small stock and poultry, and growing and trading their own fresh vegetables in the market. Individual women taking part in the focus groups reported their involvement with farming and food crop production as depending on the amount of land available to them, their education level, and the range of other income-generating possibilities open to them.

None of the women in the focus groups expected to reduce or abandon any of their farming or small business activities with the commencement of vegetable-growing through their TAHA-supported groups. Instead, the vegetable-growing will take place on land rented by the groups for this purpose – and thus will not displace

¹⁹ A sample individual case history of a middle-aged widow involved in fresh vegetable production in Nduruma is given at Annex 5.

farming activities on the group members own individually-acquired land. Moreover, as they were gaining access to land for vegetable-growing as a group, the women group members are thereby avoiding the difficulties that might face them individually as women seeking to acquire their own land. Although they were largely expecting to have to contribute some of their own unpaid labour in the first few months of vegetable-growing, until the activity starts to produce a steady income, the medium-term objective of all the groups was to be able to produce enough income for the group to pay casual labourers to do the majority of the work. The labourers are likely to be selected firstly from among the poorer group members who would be willing to undertake this labour for extra cash income.

For the married women in the focus group discussions, their participation in the TAHA-supported vegetable-growing groups was considered as an independent activity, with their cash income from it to be controlled by them. At the same time, however, expectations were expressed that the income would be used by them to supplement total household income and particularly to support their children – rather than be income that they could fully decide to spend as they saw fit. Participants also reported that although married women with their own sources of cash income have more bargaining power in their families, and that stress and quarrelling within the household reduces as a result of the additional income, earning money by itself does not make any difference to most women's situations due to overall lack of respect for women, *“as husbands can still beat you”* and *“if you get money from the group and speak up to your husband he can tell you to leave the group”*. Some participants from the Lida Women Group specifically reported that they had already lost six group members whose husbands had withdrawn permission for them to be part of the group; others pointed out that their husbands had only supported their participation in the Lida Women Group as long as they (the husbands) did not have to put any money into it.

For the separated women and widows in the focus groups, their livelihood and food security situations were more vulnerable to begin with, and the extra cash income was definitely expected to boost their standard of living and to be fully under their control. Yet these women also reported that although *“sometimes your husband could tell you what to do, when you're alone you really miss his support”*. Moreover, as one widow elaborated,

“when you're all alone you have to make your brain really work. You have to remove the dependence mind so you can manage yourself. Maybe your husband was working and controlling everything but at least he was around and helping and you could sit together and plan together. When you're alone you have all the responsibility and no-one to help you or decide things with and discuss together.”

One thing that all the women in the TAHA-supported focus group discussions agreed on, however, was the importance to them of being self-employed which the TAHA approach offers. Participants in the discussions were unanimous in their aversion to working on any of the large farms in the fresh flower sector in Arusha Region, arguing that jobs there were mostly casual and insecure as well as low paid and with no possibility of making much money through promotion as wages were linked to and limited by education levels. Instead, focus group participants felt that their involvement with the vegetable-growing groups gave the possibility of an additional source of cash income to supplement their existing income-generating and food production activities, with open-ended possibilities for the group business to develop and expand, thus potentially increasing their individual gains substantially over time.

Participants in these four focus groups were also asked in particular about the perceived advantages and disadvantages of different types of potential involvement in agricultural investments. The main advantages reported to being outgrowers in a TAHA-supported group included: being provided with technical training and support – about their crops, about ensuring quality production, about where to sell their produce, and also about basic business skills; being facilitated to set up a reliable market for their produce from the outset; and being assisted with start-up costs, whether directly or through negotiations within the value chain, so that they do not need cash up-front when they lack capital. The main disadvantage was cited as being that once they have signed a contract and started their business, they may find they can get a higher price for their produce later from elsewhere; if they had grown fresh vegetables alone for selling in the local market

they could have taken up this opportunity but they cannot as outgrowers because of being bound by the TAHA-supported contract.

Another potential problem with outgrower contracts occurs when farmers either do not read the contracts properly or do not understand them properly, but this is something that is avoided through the TAHA approach, as the organization seeks to ensure balance and transparency between all parties from the outset. For example, when members of the Lida Women Group met with Moshono Agroforest Company to discuss prices and contracting arrangements, Moshono explained what their costs would be in order to sell the group's mushrooms and also what the end price to customers would be and therefore what the Moshono profit margin would be. The women were satisfied with this, and reported that they felt confident of being able to negotiate for a price increase in future should they achieve a high quality product that could be sold by Moshono to its customers for more money.

On the other hand, although not necessarily a problem for outgrower business models in general, access to water was reported as being a major problem facing the two TAHA-supported vegetable-growing groups in Nduruma, an area which is downstream of many of Arusha's large flower farms. The Lida Women Group has avoided this problem by gaining access to land for its green beans activity on one of these farms, as noted above, but at the time of the fieldwork TAHA was still helping the Minanko and Lukusangire groups to look for suitable land to rent where both access to and the cost of water will not be a problem.

Concerning the advantages and disadvantages of plantation-style agricultural investments, participants in these four focus groups clearly considered them to be less desirable than outgrower opportunities, mainly because of the low wages and the long hours of work noted above. Other disadvantages particularly noted for casual labour on plantations were cited as non-pay for sickness and the fact that the income is fixed. In contrast, with growing fresh vegetables in the group, a sick group member would still be able to gain an income, and older group members would be able to work fewer hours of their own labour, according to what they can manage, yet still earn cash income from the group activity – the group thus also being perceived as a social safety and personal relations net. Finally, a further disadvantage of plantation work was reported to be that although the work is regular, the days are long and tiring and workers therefore have no energy left over to engage in other income-generating activities to boost their overall income – a point also raised by some of the women wage workers at the Multiflower factory in Arusha town (see above).

In sum, although it was still early days at the time of the fieldwork, the TAHA approach seems to offer the potential to support farmers in engaging with private sector agricultural investments in a way that has very positive gender and equity implications.

3.4 General Findings from the Focus Groups

Taken as a whole, the focus group discussions held during the fieldwork also produced some more general findings about the gender and equity implications on labour and income-generating opportunities from land-related investments in agriculture. These relate to questions asked about participants' perceptions of the impact of their involvement in the different labour and income-generating opportunities on their livelihoods and food security as well as their broader attitudes to agricultural investment.

First, participants in 12 of the focus groups were asked about the impact of their involvement in the specific labour or income-generating opportunity from the agricultural investment with which they were connected, whether as wage workers, outgrowers or farmers, on their family's cash income levels; in 11 focus groups they were also asked separately about the impact on their family's food situation. The results are as set out in Charts 3 and 4, below.

Chart 3: Impact on Family Cash Income of Involvement with the Agricultural Investment

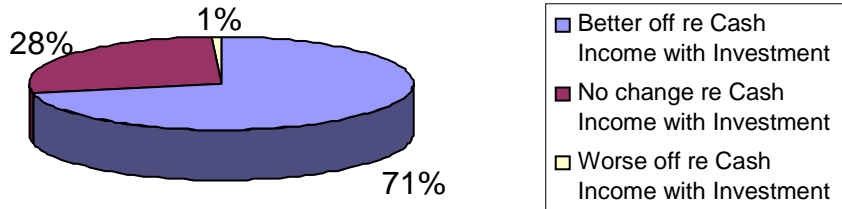
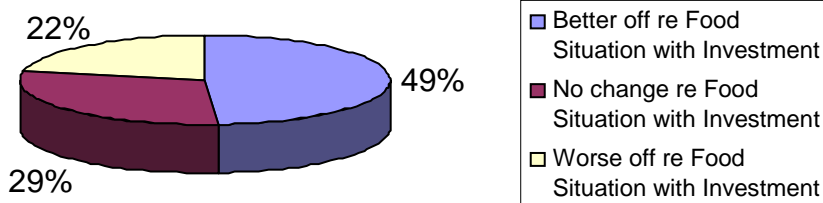
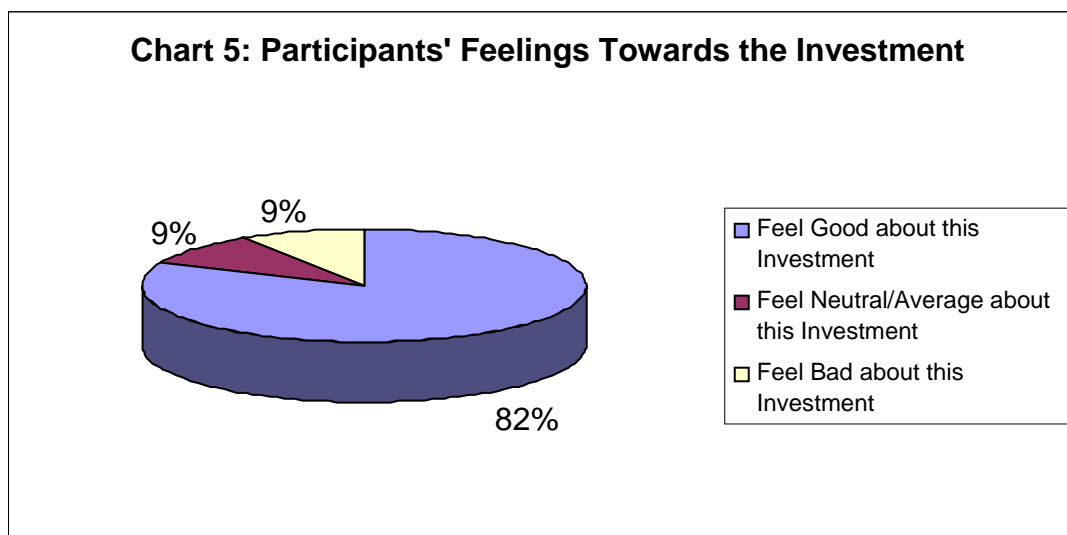


Chart 4: Impact on Family Food Situation of Involvement with the Agricultural Investment



In the case of impact on cash income, the no change responses were mainly given on the part of participants who were very new to the agricultural investment and had therefore not had time to see a benefit. Some no change responses and the sole worse-off income response were due to cases where the costs of production had been found to be too high, or at least higher than they had expected. In the case of impact on family food situation, the majority of no change and worse-off responses were attributable to the increasing prices of food, which meant that for some families income from involvement in the agricultural investment was not able to keep up with food costs. However, a clear majority of the focus group discussion participants perceived a beneficial impact on cash income from the labour and income-generating opportunities that had arisen through their involvement in the agricultural investment over time periods between one and 16 years, but more commonly between two and eight years. Additionally, around half of the focus group participants noted improvements in their family food situation.

Second, participants in 14 of the focus groups were asked about their feelings towards the specific agricultural investment they were involved with – the business/business model as well as the specific labour or income generation opportunity they were engaged in. Eighty-two percent reported a positive attitude to it, 9% a neutral or average attitude, and 9% a negative attitude. Chart 5, below, illustrates this data. In addition, participants in 13 of the focus groups were asked if they would welcome more agricultural investments of the same nature in their area, and there was a unanimously positive response.



While the strongly positive responses to these ‘attitudinal’ questions may to some extent have been coloured by the fact that the participants clearly knew that the focus group discussions had been facilitated by, and were fully supported by, the three companies/organizations involved in this research, the discussions themselves were generally open and free-ranging and participants expressed a number of specific criticisms of the different businesses/business models during the discussions. They were also invited to express concerns and ideas for constructive changes, which they all did. The minority of neutral attitudes expressed were mainly in cases where a person was new to the labour or income-generating opportunity and had not had time to see any benefits to themselves, or where the returns were still seen as relatively low, as was the case in the jatropha farmers’ group. The negative attitudes expressed were almost exclusively restricted to one specific women’s focus group in an area where the returns to flower seed production had not been as high as hoped in relation to the costs, and where the women also claimed not to have signed contracts in their own names.

Therefore, although the findings include the views of some people whose experience of the investments is still limited (e.g. Diligent jatropha farmers and TAHA-supported women group members) the conclusion is that the positive attitude expressed towards these types of agricultural investment – which are mainly not reliant on large-scale land acquisition but instead enable rural women and men to take up labour and income-generating opportunities in agriculture using land they either own or rent themselves – was on balance genuine. A further conclusion is that more such investments would be welcomed so long as the various concerns are addressed in a constructive way. It should be reiterated, however, that it was not within the scope of this study to analyse business and economic sustainability, and thus these positive conclusions arise from the perspective of the livelihoods of the focus groups participants rather than from a business case perspective concerned with long-term financial viability.

3.5 General Findings from the Iterative Research Approach

The iterative process engaged in with the two private sector companies supporting this research included going back to them after fieldwork to share feedback on some of the issues that emerged during the focus group discussions. The issues raised with them are summarized in Table 2, overleaf, and included issues raised by focus group participants as well as some suggestions from the research team. The feedback sessions gave the companies a chance to comment on the issues and to discuss with the team what they could do in response to improve the gender and equity implications of their agricultural investments. This process only took place with Diligent Tanzania Ltd and Multiflower Ltd because the TAHA-supported women groups were too new for constructive feedback geared towards improvements to be warranted.

Table 2: Summary of issues discussed with the companies

Company/crop	Main Suggestions made to Companies during Feedback
Diligent jatropha farmers	<ul style="list-style-type: none"> - The farmers would like the prices to be increased. They get TSh 300 per one gallon tin/<i>sado</i> of seeds, which requires about 18 hours of labour to collect. This is because of major flaws with the collectors system which they are not very happy with. - If the business becomes more lucrative, the men may take over it. The model initiated by Partners for Development might guarantee that everyone gets their fair share so it was suggested that Diligent should extend that model and replace the collectors system.
Multiflower flower seed outgrowers	<ul style="list-style-type: none"> - The farmers complained about itches and allergies from the flowers. They would like to receive equipment such as masks, gloves and boots. - The farmers asked to have better timing for payments. Waiting three months after the delivery of seeds means that they do not have their money when it is most needed. They also felt that the prices should be higher. - Women farmers in Lepurko suggested that the company should help them to get metal roofs and irrigation equipment which they could pay back to the company. - Other issues raised were over transportation and provision of sacks for collecting seeds.
Multiflower vegetable seed outgrowers	<ul style="list-style-type: none"> - Vegetable seeds farmers asked for higher prices of seeds to match the cost of living and rising input prices. - Vegetable seeds farmers asked about the possibility of also using the vegetables they produce to generate additional income, for instance using tomatoes to make tomato paste. - The team suggested that Multiflower consider the possibility of re-designing the contract for vegetable seeds so that the names of both spouses could be included. This would support the wives in having better bargaining power and say in decision-making and in case of divorce. - Issues raised specifically by women vegetable seed outgrowers were over loans to rent-in more land, hire casual labourers and buy equipment, as well as over access to water, because of the particularly high barriers to entry they face in this capital-intensive business.
Multiflower factory wage workers	<ul style="list-style-type: none"> - The workers would like to have higher wages. They feel that the wages are not in line with the cost of living and especially food. - The number of men in permanent jobs is higher than the number of women and the team suggested a better balance should be sought. - The workers would like to have uniforms. At the time of the fieldwork not all of them had uniforms. - Other issues raised were over transportation to work, language and computer training, and medical insurance for children.

In responding to the feedback, Diligent confirmed that the price of the jatropha seeds should be TSh 500 (US\$ 0.33) per one gallon tin/*sado* (just over 2kgs) and not the TSh 300 (US\$ 0.20) that the farmers reported getting for this amount of seeds from their collectors. The company was thus aware of the main fault with its collectors system and said it would like to switch totally to the new group-based collection model set up by Partners for Development. However, for the time being the company remains primarily focused on establishing an operating profit for the business and does not have sufficient resources to effect this switch in collection system with its own resources.

Diligent launched a pilot project in 2011 with Dutch funding to certify smallholders according to biomass sustainability norms which includes the assessment of the feasibility of smallholder certification and mapping of potential bottlenecks for certification and of establishing a farmer organization as a legal entity for group certification; data collection has also been done on cultivation methods and socio-economic status and impact. This project is expected to provide the company with a better knowledge of their farmers' characteristics and needs and hopefully serve as a basis for making the business model more inclusive and transparent through setting up more Partners for Development-style collection groups in due course.

Likewise, Multiflower received well the various issues raised. Concerning the payment system for flower seed outgrowers, the company has already set in place plans to alter this to the benefit of the outgrowers, as noted above, and prices have been raised since the time of the fieldwork. The suggestion by women farmers in Lepurko for the company to fill its trucks with useful goods such as metal roofing materials and irrigation equipment when coming to collect flower seeds was received with interest and the company said it would be considered. Issues of prices and wages are, naturally, less straightforward, as the company has to consider the overall market conditions and make sure it continues making an operating profit in order to stay afloat. If the company goes under, the outgrowers and wage workers will lose the source of livelihood they already have. Thus, although Multiflower is concerned about the rising cost of food and living costs locally, it feels a bit constrained in what it can do to address this.

On the issue of using tomato seeds by-products to make tomato paste for additional cash income, this is something that Multiflower said it has already been investigating although it is constrained by the fact that tomatoes are ripe for seed extraction at a different time to when they are ripe for tomato paste production. Finally, on the issue of contracting the higher return vegetable seeds with both spouses jointly, in order to improve the sharing of benefits to wives, this is something that the company said it would be willing to consider. However, it expressed concern that male vegetable seed outgrowers may not agree to this if they perceive it to mean a loss of income, or loss of control of income, to them; also those female vegetable seed outgrowers who are already contracted individually to the company may not agree. If this were to be established, it would therefore need to be accompanied by substantial sensitization among outgrowers to explain the benefits.

In sum, the iterative research approach that was utilized during this fieldwork enabled a constructive engagement to be developed with both the two private sector companies involved. Feedback from the companies was that they appreciated hearing the outcomes of the fieldwork, and the preliminary conclusions, so that they could have a chance to comment and discuss how they might be able to respond. Both companies seemed concerned to ensure that their agricultural investments have positive gender and equity implications, seeing this as making good business sense. It is to be hoped that following this research, they will both now proceed with addressing some of the various issues raised, and collaborate in any follow-on research that may take place.

4. Conclusions and Policy Recommendations



As noted in Section 2.2 above, the Tanzanian case study set out to explore the following three broad research questions:

- Do the selected investments/businesses have gender-differentiated implications with respect to labour and income-generating opportunities for small-scale farmers and wage workers directly involved in and/or affected by these initiatives?
- Do the land-related investments analyzed affect poor rural women and men differently in their access, use and control of land?
- Do the land-related investments analyzed provide good practices in relation to employment and land which can be used as models for regulatory frameworks on investments and policy-making?

Building on the foregoing analysis of issues relating to the five different labour and income-generating opportunities researched, this section seeks to answer these broad questions and draw general conclusions from the case study.

First, the fieldwork has clearly shown that there are gender-differentiated implications with respect to labour and income-generating opportunities for small-scale farmers and wage workers directly involved in and/or affected by the investments/businesses analyzed. Second, the fieldwork has shown that the land-related investments analyzed do affect poor rural women and men differently in their access, use and control of land. Third, the fieldwork has also shown that the business models analyzed do provide examples of good practices in relation to employment and land which can be used as models for regulatory frameworks on investments and policy-making.

It is clear that the businesses examined are creating new labour and income-generating opportunities for the rural population of Arusha Region. However, as the analysis of the case study to this point has shown, the specific gender and equity implications from jatropha seed collection, flower seed production, vegetable seed production, wage work in a horticultural factory, and fresh vegetable production are all dependent on multiple factors. These include the particular socio-economic and cultural status and circumstances of the individual person engaging in these opportunities, as well as the type and structure of the business model, the practices of the company (including differences in participation by women and men), the level of maturity and resilience of the business, the crop or product involved, the labour requirements and the amount of land utilized, the complexities of intra-household relations, and so on. Nonetheless, it is possible to draw some overall conclusions about gender implications across all of the businesses explored in this fieldwork in relation to the first two broad research questions, as summarized below in Table 3; Table 4, further below, then summarizes the good practices that have emerged.

Table 3: Summary of gender implications by area of impact

Area of impact	Main gender implications
<p>Labour and income-generating opportunities</p>	<ul style="list-style-type: none"> - Women have better access than men to the possibility of earning a small cash income from jatropha seed collection but only because this is still largely considered a women’s crop as it produces only low returns – highlighting that different types of crop may have different gender implications. - Married women who are not vegetable seed or flower seed outgrowers in their own right have increased work loads and do not benefit equally from the investments with their husbands, particularly in the case of higher-return vegetable seeds. This suggests that income generation opportunities that are not specifically targeted at women may increase their workloads while not providing them with the same benefits as men. - Women who are vegetable and flower seed outgrowers in their own right tend to have fewer resources than men and this limits their possibilities for income generation and for growing their businesses. - Women have equal and sometimes better access than men to formal wage employment in horticulture but gender division of roles that can lead to segregation between ‘men’s’ and ‘women’s’ work still exist. - Group-based outgrower arrangements in fresh vegetable production offer both women and men better possibilities for income generation than through casual labour on horticultural plantations. -Group-based outgrower arrangements in fresh vegetable production provide women in particular with a source of potentially expanding additional cash income to supplement but not replace existing income-generating activities and food production.
<p>Access, use and control of land</p>	<ul style="list-style-type: none"> - Jatropha seed collection – where jatropha is planted only as hedges and fences to mark boundaries on the land – offers women in particular the opportunity to earn income from land that they farm, even when their husband is considered to own it. - Women who are contracted as individual flower seed outgrowers in their own right are not necessarily more likely to have better control and more decision-making powers within their household over use of land and the income from it. - Women contracted as vegetable seed outgrowers in their own right can take advantage of this high return business justifying the renting-in of additional land instead of substituting land used for own food crop farming, thereby providing a supplementary income source and protecting own food supply. However, they need to have resources available to start this business. - Women who are farming crops for agricultural investments as wives of contracted outgrowers have enhanced decision-making power over use of land but access and control of land are still dependent on their husbands. - Women involved in outgrower groups have better access to land and can avoid having to substitute their own food crop farms for the crops of the agricultural investment.

Table 4: Summary of good practices by business model

Type of Business Model	Crop	Good Practices
Group-based outgrower arrangements	Jatropha	<ul style="list-style-type: none"> - group members decide on share of revenue to individuals and to the group for its costs - all group members names listed on contracts with the purchaser - the business utilizes existing resources more effectively, as jatropha hedges otherwise produce no cash income and are not replacing food crops on people's land - possibilities for groups to explore processing activities such as jatropha soap-making, and for members to gain access to improved stoves and jatropha oil for their own use
	Fresh vegetables	<ul style="list-style-type: none"> - facilitation from sector-specific membership organization to support local groups in getting established and negotiating within the value chain - some financial support is provided to help with start-up costs, dependent on external funding - group structure enables access to land for women who might find this difficult in their own right, and also enables group members to share the benefits distributed to, and inputs required from, each of them according to their abilities and needs (social safety net function) - some employment opportunities are available for poorer group members who can be paid to work as casual labourers on the group farm as needs arise, but with no guarantees in relation to income
Individual formal outgrower arrangements	Flower seeds	<ul style="list-style-type: none"> - provision of inputs up-front (with costs deducted from payments for output later on) eases cash flow problems for small-scale farmers - contracts in names of individual outgrowers give women some improvements in control of the cash incomes arising; also support transparency and help all outgrowers in having better control over the production cycle - dedicated field officer system supports the outgrowers with information and training on specific farming techniques and requirements
	Vegetable seeds	<ul style="list-style-type: none"> - contracts in names of individual outgrowers protect women who have the resources to engage in this business in their own right (but issues remaining to be addressed for wives of men contractors) - provision of inputs up-front (with costs deducted from payment for output later on) eases cash flow problems for small-scale farmers - dedicated field officer system supports the outgrowers with information and training on specific farming techniques and requirements
Permanent wage workers	Flower cuttings – horticultural factory	<ul style="list-style-type: none"> - industry-wide CBAs that go beyond national minimums and help encourage better conditions, due also to competition within the industry - flexible and sympathetic approach to work/life balance issues for women workers supports wage work as a beneficial employment option for women - awareness of sexual harassment issues leading to supervision arrangements that reduce its likelihood - company support for a SACCOS and a subsidized school for employees' children

Despite the various good practices summarized in Table 4, there remains scope for improvements in the labour and income-generating opportunities explored in this fieldwork, so as to have more beneficial gender and equity implications. For example, in the case of jatropha seed collection, it is to be expected that if cash returns were higher, the crop would generate more interest from men, with potentially negative impacts on intra-household dynamics if women try to hold onto this new source of supplementary cash income for themselves. The returns currently appear to be sufficiently low that some kind of support from the government as part of a broader biofuel strategy (see below), might be warranted – as requested by focus group participants. However, it would need to be gender-sensitive so as to ensure women would benefit from this, and alternative solutions, such as expanding market opportunities, removing barriers to market and helping to reduce costs should be considered first. Beyond price issues, jatropha seed collection would also have more beneficial impacts, particularly for women farmers, if processing activities were to be developed. This could allow, for instance, women to obtain jatropha soap in place of soap they currently purchase from selling their jatropha seeds, and to benefit from improved stoves and the use of jatropha seedcake pellets and briquettes for fuel instead of spending time collecting firewood and cooking in traditional ways. As a point for further research, it would also be interesting to compare the findings of this report with information from other areas where jatropha is being cultivated specifically as a cash crop, to see whether different gender implications can be observed.

Concerning vegetable seed production, issues remain as to how the barriers constraining women's access to this income-generating opportunity in their own right can be overcome. The promotion and adoption of special measures to support women outgrowers is desirable, although it is unlikely that this could be justified as good business sense from a company perspective unless the women then produce more output, and more efficiently, than their male counterparts. Donor or government-support through some kind of public-private partnership arrangement, to help women get started in this business, would therefore be needed – or perhaps through the development of some kind of innovative private sector-led institutional arrangements between farmers, processors and supermarkets.

Concerning fresh vegetable production, there remains a concern that outgrowers may need more training and capacity building to benefit fully from this business – and again this may be dependent on continuing government or donor support through a public-private partnership arrangement or innovative private sector-led institutional arrangements. For example, farmers might need to be trained in how to impute shadow values for their labour and other inputs and hidden costs into their profit calculations (even when those inputs are donated by a project and/or seen as free). Otherwise, their ventures run the risk of folding due to lack of long-term financial viability when any start-up support is withdrawn. However, if this issue can be addressed, then it seemed clear from the fieldwork that group-based outgrower arrangements with some degree of initial support offer the huge benefit of self-employment which focus group participants, particularly women, valued above casual labour opportunities in horticultural plantations – permanent employment opportunities (albeit understandably popular with those benefiting from them) being the exception rather than the rule. Such group arrangements not only offer the possibility of social safety net benefits to poorer and more vulnerable group members, but also provide for an additional source of cash income to supplement existing income-generating and food production activities, with open-ended possibilities for the group business to develop and expand, thus potentially increasing individual gains substantially over time.

Finally, the findings of this case study also suggest some policy recommendations for land-related investments in agriculture, both in Tanzania and globally. As noted at the outset of this report, gender is being mainstreamed in the *Mkukuta II* and in the national policies and strategies of the agricultural sector, including, at the local government level, in the district planning system, but implementation remains a separate issue. For example, while one of the objectives of DADPs may be improvements in social welfare and gender equality, lack of specific budget lines associated with this may make its achievement difficult, and often the task of taking gender issues forward at local level is left to the good will and initiative of individual district staff. In 2010-11, for instance, Arumeru district supported agricultural projects for 16 groups in four villages, and 75% of the beneficiaries were women only groups, but this was only because of the resident district agricultural officer's strategy of targeting women's groups.

Problems might also arise for policy implementation because of a lack of communication between the Ministry of Agriculture and the districts. All local level technical officers in Tanzania are technically responsible to their Ministry for implementing policy, but they are not directly answerable to them as they are appointed by the local government. Thus it is important for the Ministry of Agriculture to strengthen linkages with the districts to ensure that DADPs reflect the gender and equity objectives of national policies, and that adequate budget is associated with their achievement and implementation, with appropriate national monitoring mechanisms put in place. With regards to the involvement of the private sector – identified as a priority in both the ASDP and the *Mkukuta II* – special attention is also required as to how this takes place at district level. There is also a general need to consider how all these issues can be addressed in the implementation of the TAFSIP.

In the specific agricultural sub-sectors examined in this case study, horticulture and biofuels, valuable initiatives include the TPAWU projects to mainstream gender and equity issues in the horticultural sector and the JANI project of Partners for Development to set up jatropha seed collection groups; replication of these could be considered beyond these specific sub-sectors and beyond Tanzania, and they should be showcased as good practices. Linked to this, and directly in Tanzania, procedures for setting up local groups and NGOs should be streamlined and the costs reduced so as to allow more groups to benefit from initiatives such as those of TAHA and local NGOs like Faida-Mali, which help link small-scale farmers to market opportunities. These organizations can help rural women and men with technical training and support – about their crops, about ensuring quality production, about where to sell their produce, and also about basic business skills; facilitate them to set up a reliable market for their produce from the outset; and assist them with start-up costs, whether directly or through negotiations within the value chain, so that they do not need cash up-front when they lack capital. More generally, as these cases suggest, there is also a strong argument to be made for setting up an enabling environment for farmer's organizations to operate in, encouraging the development of local groups, and for encouraging them to actively support equitable gender outcomes in agricultural investments.

Further, as TPAWU's recent projects in particular suggest, sharing good practices and raising employers' and employees' awareness on gender and equity issues and labour conditions has proved to have a beneficial effect on raising standards in the horticultural sector as a whole. This has arisen through healthy competition among private sector companies, which in turn provides wage workers with more leeway to negotiate over employment opportunities, terms and conditions. The Multiflower CBA is a case in point, whereby standards have been set beyond those used in the TAHA, TPAWU and ATE sponsored minimum CBA – which still remained to be officially endorsed by the Ministry of Labour at the time of the fieldwork. The result, as explained by Multiflower outgrowers, is that farmers were keen to join their scheme, and, where given the choice, they preferred to stay with Multiflower because of the clarity and transparency of the contracts. Similarly, in the case of Diligent, farmers became keen to collect seeds for an additional source of income once the company set up a reliable collection system, and this now provides a solid basis for improvement through moving to the Partners for Development group model.

In the biofuels sector, it is clear that national policy now needs to develop the sole and very general gender and equity principle included in the recently-published national biofuels guidelines. The guidelines also need to be expanded in scope to consider the use and development of biofuels in Tanzania, including possible price supports for farmers. A national biofuels policy is needed for solid biofuels and biomass (including use of jatropha seedcake) and to support the domestic use of jatropha oil, including through a clear tax strategy. This is because, while around 90% of energy use in Tanzania is solid biomass, the current guidelines only deal with liquid biofuels.

More collaboration and interaction is also needed between national ministries to more widely support the establishment of land-related investments that are inclusive of local populations, conducive to rural development and sensitive to gender and equity concerns. This would become easier if gender specialists were recruited in every ministry and their position made stronger within the organizational structure. Instead, at present, the Gender Focal Points in ministries do not have the capacity to take gender issues forward, as their gender-related tasks come in addition to their technical work. In addition, the ministry responsible for gender does not have the capacity to oversee all of the gender-related programmes which

other ministries are leading, and it would benefit from an action plan to support it in implementing the Government's gender policies.

More globally, the findings of this case study indicate clearly that land-related agricultural investments do have gender-differentiated implications for labour and income-generation opportunities for rural women and men, and for their access, use and control of land. This means that the governments and international organizations that are encouraging investments in agriculture need to specifically address gender and social equity concerns, and not just concerns of agricultural and economic growth, through gender-equitable investment policies, programmes and strategies. The RAI principles and the VG Tenure provide a particular opportunity at the present time. The RAI principles should be revised to properly reflect gender and social equity issues and encourage gender analysis and specific provisions in support of gender and social equity for agricultural investments alongside corporate social responsibility initiatives. Specific recommendations should also be provided to include gender and social equity criteria in “*the formulation of more equitable investment contracts and selection of suitable business models including joint ventures, contract farming and outgrower schemes, as well as appropriate legislative and policy frameworks in receiving countries*” (Knowledge and Exchange Platform for Responsible Agro-Investment (RAI) website). Finally, it would be of great benefit to widen the RAI consultation process to include women's organizations, farmers' and producers' organizations (mixed and women only), trade unions and companies and organizations that are already promoting good practices – such as Multiflower, Diligent and TAHA – and that can therefore feed their experiences into the broader policy-making process.

In sum, the current global policy context, with its high level of interest in land-related agricultural investments and appreciation of the role of the private sector, provides a potentially unique moment in which to push forward gender and social equity concerns onto the mainstream policy-making agenda. Backed by the evidence base presented in the most recent SOFA, there can be no doubt of the central importance of ensuring that gender and equity issues are properly and coherently addressed in all agricultural development policies, programmes and strategies. This case study of agricultural investment in Northern Tanzania demonstrates the clear value of bringing ground-level evidence of good practice from the field into these policy debates.

Annexes



Annex 1 – List of Key Informants

Bitegeko, Janet, Executive Director, Agricultural Council of Tanzania (ACT)

Chambers, Mike, Managing Director, Tanhort Small Grower Development Ltd (TANHORT)

Gevaert, Jan, General Manager, Diligent Tanzania Ltd

Elipokea, Michael, Head Flower Seeds Field Officer, Multiflower Ltd

Joseph, Eva, Workers' Representative, Multiflower Ltd

Kabengwe, Kabengwe Ndebile, General Secretary, Tanzania Plantation and Agricultural Workers Union (TPAWU)

Kidala, Diana E., Nutrition Co-ordinator, Tanzania Program, Partners for Development

Kisenga, Judith, Assistant Director of Gender Development, Ministry of Community Development, Gender and Children (MCDGC)

Lyela, Justina, Director of Policy and Advocacy, Association of Tanzania Employers (ATE)

Majo, Vincent, Vegetable Seeds Field Officer, Multiflower Ltd

Manetu, Boca, Policy Analyst, ACT

Mbilinyi, Raymond P., Director of Investment Promotion, Tanzania Investment Center (TIC)

Mbise, Joyce, Manager – Mkulima Seeds, Multiflower Ltd

Mcha, Marietta, Assistant Director of Employment Promotion, Ministry of Labour

Mkindi, Jacqueline, Executive Director, Tanzania Horticultural Association (TAHA)

Mlengaya, Magdalena, Relations and Advocacy Officer, Faida-MaLi

Mosha, Philippina, Education, Women and Youth Officer, TPAWU

Nassary, Elirehema, Field Officer, Diligent Tanzania Ltd

Ndamanhyilu, Isaac, Community and Advocacy Officer, TAHA

Ndaskoi, Meshack, Director of Gender Development, MCDGC

Osambi, Josiah, Flower Seeds Field Officer, Multiflower Ltd

Owen, Michael, General Manager, Hortanzia Ltd

Phillip, Happiness, Agricultural Field Officer, District Government of Arusha Municipality

Scheltema, Tjerk, General Manager, Multiflower Ltd

Schuma, Evaline K., Production Manager, Multiflower Ltd

Solomon, Grace, District Agricultural and Livestock Development Officer, District Government of Arumeru

Temu, Amani, Field Officer, TAHA

Warmka, Paul, Country Program Director, Tanzania Program, Partners for Development

Annex 2 – List of Focus Group Discussions

- Miririny village, King'ori ward, Arumeru district – mixed ordinary jatropha farmers (Diligent)
- Miririny village, King'ori ward, Arumeru district – mixed jatropha collectors (Diligent)
- Kiserian village, Arumeru ward, Arumeru district – male flower seed farmers (Multiflower)
- Kiserian village, Arumeru ward, Arumeru district – female flower seed farmers (Multiflower)
- Mareu village, King'ori ward, Arumeru district – male flower seed farmers (Multiflower)
- Mareu village, King'ori ward, Arumeru district – female flower seed farmers (Multiflower)
- Lepurko village, Nanja ward, Monduli district – male flower seed farmers (Multiflower)
- Lepurko village, Nanja ward, Monduli district – female flower seed farmers (Multiflower)
- Multiflower factory, Njiro ward, Arusha town – married women wage workers (Multiflower)
- Multiflower factory, Njiro ward, Arusha town – single, separated and widowed women wage workers (Multiflower)
- Maweni village, Kikwe ward, Arumeru district – male vegetable seed farmers (Multiflower)
- Maweni village, Kikwe ward, Arumeru district – female vegetable seed farmers (Multiflower)
- Ilboru ward, Arusha town – young single and married women fresh vegetable growers (TAHA)
- Ilboru ward, Arusha town – older single and married women fresh vegetable growers (TAHA)
- Nduruma village, Nduruma ward, Arumeru district – married women fresh vegetable growers (TAHA)
- Nduruma village, Nduruma ward, Arumeru district – widowed women fresh vegetable growers (TAHA)

Annex 3 – Demographic Distribution of Focus Group Participants

Table A1: Sex and Age Distribution of Focus Group Participants

Group Number	Location	Men - 15-24	Men - 25-35	Men - 36-45	Men - 46-55	Men - 56 and up	Total Men	Women - 15-24	Women - 25-35	Women - 36-45	Women - 46-55	Women - 56 and up	Total Women	Total
1	Miririny - King'ori	0	2	1	2	1	6	0	2	1	1	0	4	10
2	Miririny - King'ori	1	1	5	1	1	9	1	2	2	1	0	6	15
3	Kiserian	0	0	0	0	0	0	0	2	1	2	5	10	10
4	Kiserian	0	1	1	4	6	12	0	0	0	0	0	0	12
5	Mareu - King'ori	0	1	4	1	5	11	0	0	0	0	0	0	11
6	Mareu - King'ori	0	0	0	0	0	0	1	3	4	1	0	9	9
7	Lepurko - Maasai	0	4	1	3	1	9	0	0	0	0	0	0	9
8	Lepurko - Maasai	0	0	0	0	0	0	0	2	2	0	1	5	5
9	Multiflower Factory	0	0	0	0	0	0	1	5	3	0	0	9	9
10	Multiflower Factory	0	0	0	0	0	0	0	0	10	0	0	10	10
11	Maweni	0	0	0	0	0	0	1	3	1	2	0	7	7
12	Maweni	0	3	1	0	1	5	0	0	0	0	0	0	5
13	Ilboru	0	0	0	0	0	0	0	3	3	0	0	6	6
14	Ilboru	0	0	0	0	0	0	0	0	2	2	0	4	4
15	Nduruma	0	0	0	0	0	0	0	6	7	3	0	16	16
16	Nduruma	0	0	0	0	0	0	0	0	0	2	1	3	3
Totals		1	12	13	11	15	52	4	28	36	14	7	89	141

Table A2: Sex and Marital Status of Focus Group Participants

Group Number	Location	Men - Married	Men - Single	Total Men	Women - Married	Women - Single	Women - Widowed	Women - Separated	Total Women	Total
1	Miririny - King'ori	6	0	6	4	0	0	0	4	10
2	Miririny - King'ori	8	1	9	4	1	1	0	6	15
3	Kiserian	0	0	0	7	0	2	1	10	10
4	Kiserian	12	0	12	0	0	0	0	0	12
5	Mareu - King'ori	11	0	11	0	0	0	0	0	11
6	Mareu - King'ori	0	0	0	7	1	0	1	9	9
7	Lepurko - Maasai	9	0	9	0	0	0	0	0	9
8	Lepurko - Maasai	0	0	0	4	0	1	0	5	5
9	Multiflower Factory	0	0	0	9	0	0	0	9	9
10	Multiflower Factory	0	0	0	0	1	4	5	10	10
11	Maweni	0	0	0	5	0	0	2	7	7
12	Maweni	5	0	5	0	0	0	0	0	5
13	Ilboru	0	0	0	4	2	0	0	6	6
14	Ilboru	0	0	0	3	0	0	1	4	4
15	Nduruma	0	0	0	16	0	0	0	16	16
16	Nduruma	0	0	0	0	0	3	0	3	3
Totals		51	1	52	63	5	11	10	89	141

Annex 4 – Indicative Data on Labour Issues and Training

During the focus group discussions in Arusha Region, some generic questions were used to gather some very basic numerical data on labour and training issues. The aim of this was to provide some indicative data on issues that might benefit from being systematically researched in a follow-up survey or quantitative study. Due to time and resource constraints, this data was neither gender-disaggregated nor was it systematically gathered across all focus groups (whose main purpose was to facilitate qualitative discussion). The data collected is also presented here with the important caveat that the focus groups themselves can in no way be considered as statistically representative of any population subset.

Employment Status

Two of the 16 focus groups were specifically composed of permanent wage workers at the Multiflower Factory. In one discussion with Diligent farmers and one discussion with Multiflower flower seed outgrowers, the company field officer (an employee) took an active part in the discussion. The two Diligent focus groups included those with more formal arrangements (the collectors), and those who were ordinary farmers selling seeds to the company through the collectors but with no contractual or even associational relationship with it themselves. In the case of Multiflower vegetable and flower seed farmers, 59 participants had formal outgrower contracts in their own sole name, and 8 participants were informal outgrowers who were either new to Multiflower and had not yet got a contract (one person) or were married women who farmed vegetable and flower seeds for formal outgrower contracts in their husbands' sole name. Among the four TAHA focus groups, 10 participants were formal outgrowers (in the Lida Women Group which was more established), while 19 participants (in the Minanko and Lukusangire groups) were not yet formally established as outgrowers. In sum then, of all 141 people who took part in the focus group discussions, 15% were employees and 85% were outgrowers, of whom 64% were formal outgrowers or collectors and 36% were farmers with no formal outgrower contracts or formal associational relationships.

Trade Union and Cooperative Membership

Participants in all 16 focus groups were asked about their membership of formal trade unions and farmers' cooperatives. No-one was a member of a trade union, but 21% of participants, including both women and men, were members of coffee farming cooperatives; these participants were unsurprisingly clustered among the groups in locations where coffee was farmed.

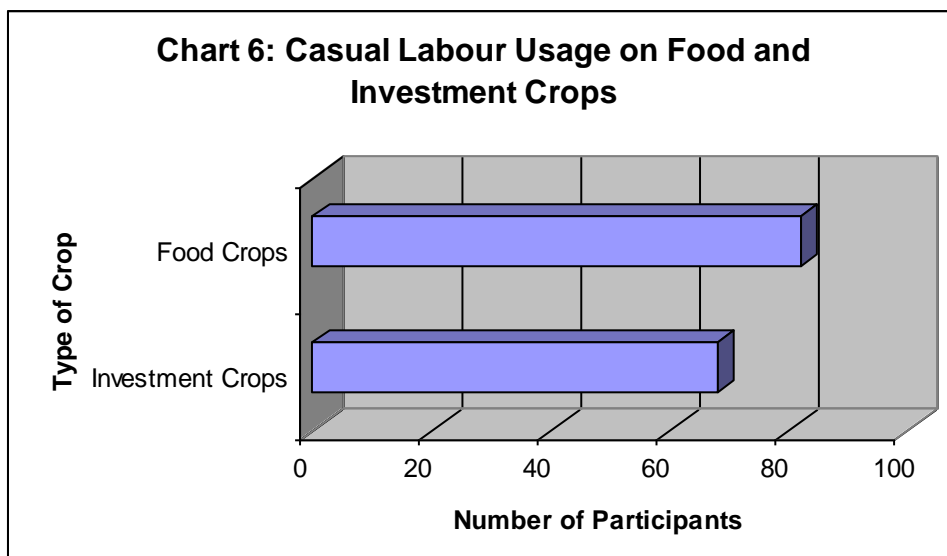
Reasons given as to why the majority of participants were not members of cooperatives were predominantly because these were seen as being only for farmers of certain cash crops such as coffee and therefore not relevant for people not farming coffee. However, in some places, participants mentioned that no farmers' cooperatives had visited their areas to solicit members and so there was no opportunity for them to join. Reasons given by the women wage workers at the Multiflower factory as to why they were not members of a trade union were mainly because of the cost of membership dues, which required a monthly commitment from their salary that the women did not want to make.

A majority of participants across all 16 focus groups reported membership of other types of formal associations, notably savings and credit cooperatives (SACCOS). There are 30 registered SACCOS in Arumeru District (where most participants lived), and, as noted in the main report above, most permanent staff at Multiflower belong to the SACCOS there. A number of focus group participants were also members of small informal farmer groups in their villages, notably in Nduruma where most of the women had joined a small group with a goat project.

Casual Labour

Participants in 11 of the focus groups were also asked about their use of casual labour on both their food crops and their crops grown for the agricultural investment they were involved with and in

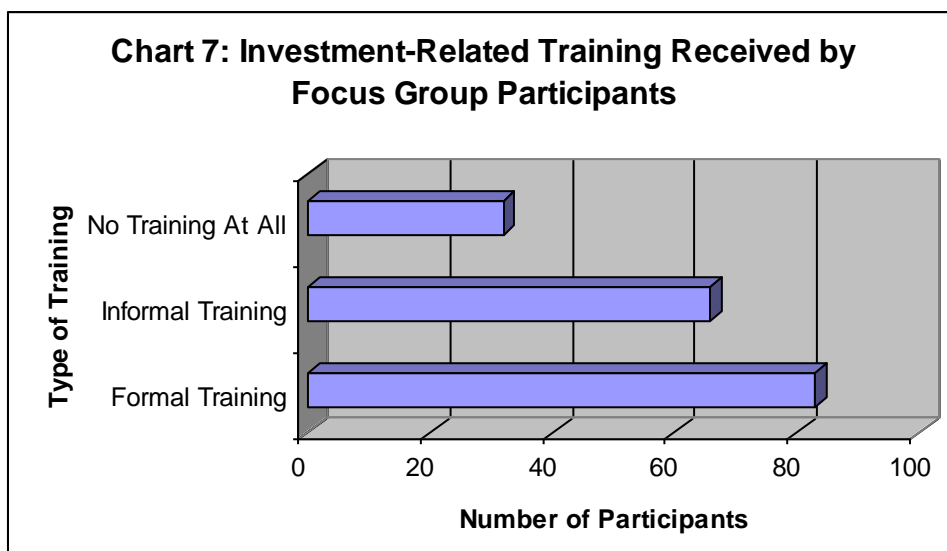
connection with which they were taking part in the focus group discussion (their ‘investment crops’). As Chart 6 illustrates, below, 75% of them reported having used casual labour on their investment crops in the current season and 90% of them on their food crops.



Very few of the focus group participants undertook casual labour themselves. This is unsurprising given that they were involved in one form of agricultural investment or another and therefore already very busy with their own farming activities. The few who did undertake casual labour were mainly flower seed farmers with only small flower farms who helped some of their neighbours with bigger flower farms once they had finished their own work. Because they had their own farms and knew the work involved, they were both skilled enough to be trusted to do the work and not as concerned about health issues as potential casual labourers from among local non-flower seed farmers.

Training Issues

All 141 focus group participants were asked about any formal and/or informal training they may have received in relation to the agricultural investment they were involved with and in connection with which they were taking part in the focus group discussion. Fifty-nine percent reported having received some kind of formal training, whether attendance at a seminar or training day in Arusha town (at the Multiflower factory and at a jatropha workshop), or attendance at a village training meeting led by a field officer. In addition, 47% of participants reported having received informal training through the regular one-to-one on-farm extension visits carried out by the Multiflower flower seed field officers. Those participants who reported receiving no training of any kind at all were mainly women vegetable seed farmers who worked on contracts held in their husbands’ sole names, women among TAHA’s Minanko and Lukusangire vegetable groups in Nduruma who were not yet formally established, and some women in the Lida Women Group. These latter were expecting to receive training from their fellow group members who had attended formal training on the group’s behalf. Chart 7, overleaf, illustrates the data, with some participants having received both formal and informal training.



Recommendations for a Follow-up Systematic Quantitative Survey on Labour and Training Issues in Arusha Region, Northern Tanzania:

- Investigation of effects of SACCOS and informal farmer associations on supporting livelihoods, including through analysis of cash income directly derived through these channels;
- Detailed investigation into casual labour usage among farmers and outgrowers involved with investment crops, to help understand the multiplier effects for local labour and income-generation, as well as the production costs of the farmers and outgrowers;
- Investigation of financial and opportunity costs of attendance at different types of training and the perceived impacts and benefits of attendance of those attending, including investigation of whether there are any differences by gender in either the costs or the benefits.

Annex 5 – Sample Individual Case Histories

Case 1

Lucia²⁰ is in her late 20s and one of two wives to her Maasai husband, with three children. When she got married her husband gave her land to farm on which she farms 1 acre with flowers and 3 acres with maize and beans. She has a flower seed contract with Multiflower in her own name, and her co-wife and husband each have contracts in their own names for the land they each farm. Although the land was given to her on marriage for her use, it was Lucia's husband who told her to start growing flowers. He also told her that most of the money from her flower seeds would be used to contribute towards the school fees for their children, although she keeps a little of the money for her own small needs. In Lepurko where they live, no-one is renting land and there is no way to acquire access to additional land for flower seed production. Thus, on starting to farm flowers, Lucia had to reduce the area she had under cultivation of maize and beans because her total land area did not change. On balance Lucia is happy with her flower farm, even though it has increased her labour burdens. This is because the cash income it generates enables her to support the education of her children, while in a bad year for maize harvests, it is her husband's responsibility to ensure the family's food security by either selling some of his livestock or going elsewhere to look for work to buy food. And so far, out of the four years she has been a Multiflower outgrower, she has only experienced one bad maize harvest (this year) but three years of good flower seed harvests.

Case 2

Michael is a relatively wealthy vegetable seed farmer in Maweni with a Multiflower outgrower contract. He is in his late 50s and has had five children with his one wife. He farms 7 acres of maize and 3 acres of beans on land which he acquired through his family (inherited land). In addition, he rents 6 acres on which he grows cucumber and okra in equal areas to produce seeds for Multiflower. Michael decided himself to start vegetable seed production – before this, he was using the same land to grow fresh vegetables for sale in the local market. He switched to Multiflower because he saw that the market was guaranteed and prices agreed up-front, while income from selling fresh vegetables was much more variable. He has used the money earned to support the education of his children and has earned so much from vegetable production that he took pleasure in claiming that it had made him grow fat (from more and better food). Farming is his main business, and he also keeps a few cows and goats at home. He explained that, in his family, farming is done together, so his wife is involved and sees the product from the work. Yet the Multiflower contract is in Michael's sole name, and he acknowledged that he had to persuade his wife of the advantages of joining the outgrower scheme. He also acknowledged that his wife supervises the casual labourers on his vegetable farms all day, and that she is responsible for bringing them tea in the morning and lunch as well – such that when he decided to start growing vegetables he was also adding to his wife's overall workload. Michael's aim is to expand more and more in farming, taking on larger areas and more casual labourers to produce more – and thereby also increasing his wife's work of supervising and feeding them.

Case 3

Hafsa is in her late 30s, separated from her husband and raising two school-age children. She is a permanent employee at the Multiflower factory in Arusha town, having started as a casual labourer and then working her way up to a job as a cook after serving her probationary period harvesting flower cuttings on the site. Hafsa appreciates the benefits of being a permanent employee, such as getting time off work when her children are sick, having access to medical insurance and receiving a regular salary. However, rapidly increasing living costs in the past few years, particularly with respect to food prices, have eroded the purchasing power of her salary and she has taken full advantage of the Multiflower SACCOS to take loans to support her expenses. Unfortunately she is now struggling to repay them, yet finds herself too tired from her work and household and childcare responsibilities as a single mother to undertake any other income-generating activities on the side. Moreover, because she

²⁰ All names used here are not real.

is separated, she has lost access to the land she acquired through her husband on marriage so has no possibility of farming to supplement her family's food supply.

Case 4

Rebecca is 45 years old and recently widowed; she has four children of whom two boys are still living at home. She had been living with her deceased husband in a rented house in Babati, and when he died she returned home to live with her mother in Nduruma, in the house she had grown up in, which was left to her mother by her deceased father. She also has responsibility for a young nephew and niece – the children of her brother whose wife has also died and who subsequently abandoned his children to her care. Rebecca survives through small businesses such as selling clothing and cooking and selling food. She also receives some money from her two married daughters to help support the two young children. Her mother is very old and only able to help with cooking food for the family, but not with farming. They own no land, so Rebecca farms 0.75 acres of maize on a piece of land she has rented herself. She cannot afford to rent a bigger area as she lacks capital. In the past two years she has tried growing fresh tomatoes for sale. She reached an agreement with a local trader who found her land to rent, gave her seeds, pesticides, fertilizers and paid the rent on her behalf. She did the planting and weeding and paid someone to spray the pesticides, but he then harvested the land using casual labourers, deducted all his costs and gave her some money. He set the price himself at harvest time, and there was no negotiation. The first year she got something but the second year there was a glut of tomatoes in the market, the price was very low, and she got nothing for her work after the deduction of all his costs. Rebecca now hopes that by joining one of the TAHA-supported vegetable-growing groups in Nduruma she will be able to avoid these problems and gain access to rented land through the group so as to carry out this income-generating activity in a non-exploitative way.

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