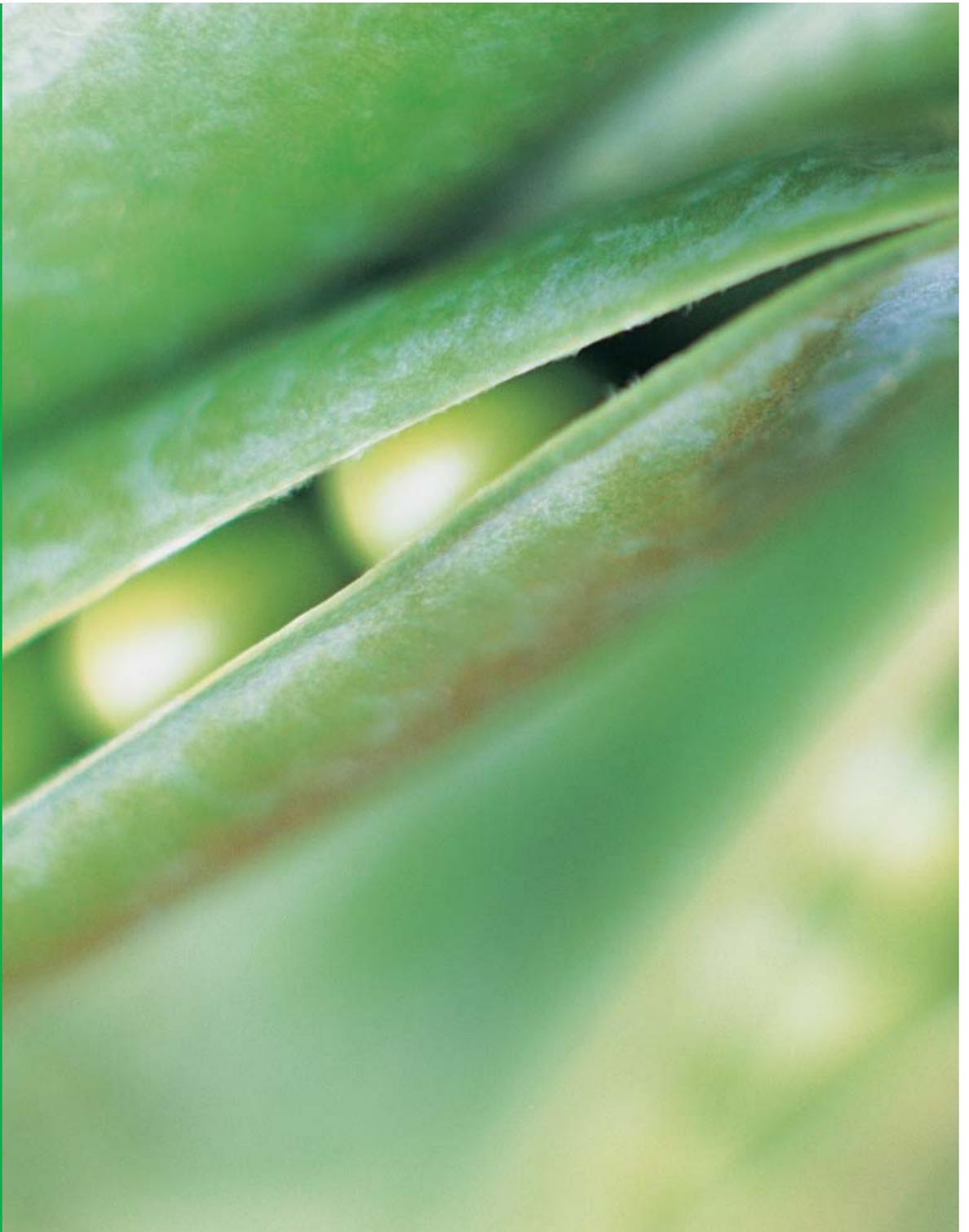


TRADE, ENVIRONMENT AND DEVELOPMENT: IMPORT OF FLOWERS FROM AFRICA TO NORWAY

BY RUTH HAUG, INGRID OHNA, JENS AUNE AND SUMA MWAITULO

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List of Abbreviations

ATO	Alternative Trade Organisations
CDI	Commitment to Development Index
CGIAR	Consultative Group for International Agricultural Research
CICERO	Center for International Climate and Environmental Research-Oslo
EIU	Economist Intelligence Unit
FLO	Fairtrade Labelling Organisation
FLP	Flower Label Programme
GDP	Gross Domestic Product
GHG	Greenhouse Gas
GMO	Genetically Modified Organisms
GSP	Generalised System of Preferences
KWDS	Kiliflora Workers Development Fund
IFOAM	International Federation of Organic Agriculture Movements
IDS	Institute of Development Studies
IIED	International Institute for Environment and Development
ILO	International Labour Organisation
IPM	Integrated Pest Management
ITC	International Trade Centre
JKIA	Jomo Kenyatta International Airport
KIA	Kilimanjaro International Airport
LDCs	Least Developed Countries
MPS	Floriculture Environment Programme
NUPI	Norwegian Institute for International Affairs
OECD	Organisation for Economic Co-operation and Development
PPP	Public-Private Partnership
SLF	Norwegian Agricultural Authority
SSB	Statistics Norway
TAHA	Tanzania Horticulture Association
TAPAWU	Tanzanian Agriculture Workers Union
TØI	Institute of Transport Economics
WTO	World Trade Organisation

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TRADE, ENVIRONMENT AND DEVELOPMENT: IMPORT OF FLOWERS FROM AFRICA TO NORWAY

SUMMARY

The purpose of this study is to assess to what degree and how it is possible to increase import of agricultural products from low income sub-Saharan African countries to Norway by benefiting from zero tariffs, and in a way that is environmentally sustainable and contributes towards poverty reduction. Mester Grønn is selected as a case because Mester Grønn has been able to utilise the zero tariff advantage for import of agricultural products granted to least developed countries (LDC) in July 2002. The import of roses from Africa to Norway has increased substantially during the last years, one important reason being Mester Grønn. Mester Grønn successfully imports 98% of its roses from Africa. The rose production creates income opportunities that contribute towards improved livelihoods of poor men and particular women in Africa. Roses produced in Tanzania and transported to Norway by air also have lower emissions than roses produced and sold in Norway. This study assesses reasons why the import of African roses by Mester Grønn has been a success and what lessons can be learned for import of other agricultural products from Africa to Norway. The study concludes that in order to reach the Norwegian market, low-income African countries need to find partners in Norway who are willing to invest in the whole market chain from production to consumer, either on their own or by linking with other professional actors. The Norwegian government could provide better incentives to Norwegian agro-business to team up with partners in low-income African countries. To the degree that it is possible to find ways of having both farmers and the private sector in Norway and in low-income African countries benefit from collaboration and increased import to Norway, the prospects for success will be greater.

INTRODUCTION

To what degree and how can trade promote development? How to establish fair trade systems that at the same time benefit the poor and protect the environment? How to connect poor men and women farmers to markets? These are questions repeatedly being asked. The many experiences from trade liberalisation show that there are winners and losers in market liberalisation and the *bottom billion* are, in general, the losers (Collier, 2007). What kind of fair trade systems are needed to avoid the poor and the environment becoming the losers? And what kind of political space exists both in the North and in the South to make it happen? Imports from developing countries appear to be accepted as long as producers' interests in the North are not threatened. But the climate change factor also plays an increasingly important role when trade and transport are being discussed. Climate change arguments can easily be used to prevent products from developing countries finding their way to Norwegian markets. How to find the right balance between the interests of the North and the South as well as protecting the globe from greenhouse gases are important issues on the trade agenda. Most people agree that addressing climate change is of crucial importance. At the same time, there is a need to create opportunities that can contribute towards improving livelihoods of the many poor people in Africa. Trade could be one out of several tools to reduce poverty and increase world equity. However, to get the bottom billion to benefit from trade is a real challenge and the constraints are many. Collier (2007: 187) states that trade is where "self interests meet ignorance": *Rich countries protectionism masquerades in alliance with anti-globalisation romantics and third world crooks*. The views differ to what degree fair trade can

be the answer. Stiglitz & Charlton (2005) have outlined a system for fair trade based on economic analysis and social justice instead of economic power and special interests. At present, there appears to be a great demand for certification systems and standards including both social and environmental concerns and leading up to the principles of fair trade. It is a bit early to say to what degree fair trade is the way to go as the experiences are somewhat mixed, but fair trade should be given a chance to prove what it is worth.

Norway scores very poorly on trade rankings such as the Commitment to Development Index (CDI). Import from LDCs in Africa, except Liberia, accounted for only 0,15% of all import to Norway in 2006 (Brunvoll, Hass & Homstvedt, 2007). During the last decades, developing countries have obtained increased market access for their industrial products to Norway; however, the same has not happened when it comes to agricultural products (Melchior, 2005). According to the World Development Report 2008, *for the poorest, GDP growth originating in agriculture is about four times more effective in reducing poverty than GDP growth originating outside the agricultural sector* (<http://web.worldbank.org/website/external/news/0>, October, 2007). The findings in the World Development Report highlight the importance of agricultural as a tool in poverty reduction.

The purpose of this study is to assess to what degree and how it is possible to increase the import of agricultural products from sub-Saharan Africa to Norway in a way that is environmentally sustainable and contributes towards poverty reduction. The focus is on agricultural products that benefit from the zero-tariff situations granted to several African countries. There are few examples of successful imports of agricultural products from developing countries to Norway due to the zero-tariff waivers. However, flower production in Eastern Africa and Ethiopia is an exception. According to Melchior (2005), increased flower import from Africa to Norway has been made possible by the generalised system of preferences (GSP). It is timely to ask why flowers have been able to benefit from the zero-tariff advantage while other products have not. The least developed countries (LDC) obtained zero tariffs for import of agricultural products to Norway from July 1, 2002 with a monitoring and safeguard measure to protect Norwegian grain and fodder production from negative impacts of import. It has never been necessary to use this monitoring and safeguard measure.

OBJECTIVES, QUESTIONS AND APPROACH

The objectives of the study are:

To assess to what degree and how it is possible to increase the import of agricultural products from low-income countries in Africa to Norway by using the lessons learned from flower import as example of how to benefit from the zero tariff advantage.

- What is the current situation regarding imports of agricultural products to Norway from low-income countries in Africa? Why is Norway performing poorly on the CDI?
- Why are roses being perceived as an import success? What lessons can be learned from the import of roses from Tanzania and Ethiopia to Norway?

To assess both environmental and social impacts of flower production in Africa.

- What are the socio-economic impacts of rose production on men and women being employed in the rose sector in Tanzania and Ethiopia?

- How important is the export of roses for countries in Africa and what is the policy in Tanzania and Ethiopia regarding the production of roses, investment, regulations, environmental standards and export?
- How does the Fairtrade certification system work in Tanzania and Ethiopia?
- To what degree is the Fairtrade certification system effective when it comes to securing environmentally sound and socially conducive production of flowers in Tanzania and Ethiopia?

To compare environmental production and transport costs of roses from Tanzania to Norwegian markets with production of roses in Norway from a greenhouse gas emission point of view.

- What is the emission of roses being produced in Africa and sold in Norway compared to roses being both produced and sold in Norway?

Since the purpose of the study is to assess to what degree and how it is possible to increase the import of agricultural products from sub-Saharan Africa to Norway by benefiting from zero tariffs and in a way that is environmentally sustainable and contributes towards poverty reduction, the import of roses by *Mester Grønn* has been selected as a case. *Mester Grønn* was selected because it has been able to utilise the zero-tariff advantage for the import of agricultural products granted to LDCs in July 2002. The approach used in the study has been literature review and interviews with key informants in Norway, Tanzania and Ethiopia as well as observations when visiting flower farms in Africa. In Norway, the main key informants have been people working within the flower sector such as *Mester Grønn* and *Gartnerforbundet* (producer cooperative), *Max Havelaar* (fair trade organisation). In Tanzania and Ethiopia, several flower farms and different producer organisations and government offices and institutions have been visited (re attachment). Also, key informants from agricultural universities, the Consultative Group for International Agricultural Research (CGIAR) and the private sector in Tanzania and Ethiopia have been interviewed.

TRADE AND DEVELOPMENT

Food miles or fair miles? Consumers in the U.K. think they should be cutting back on imports of fresh fruit and vegetables flown up from Africa, in order to save the planet from climate change. But does this make sense? Our research shows that stopping all such air-freighted imports would reduce U.K. emissions of greenhouse gases by less than 0.1%, while imposing major costs on farmers in Africa. We estimate that the U.K. alone provides a market worth £1 million a day to African producers, generating livelihoods for more than a million people. Addressing climate change is terribly important, but let's find ways of doing so which aren't at the expense of poor people elsewhere (Camilla Toulmin, February 2007, Director of IIED)

Trade and improved market access could be among several important measures to contribute towards poverty reduction in Africa. Trade in this regard should not be mistaken by being synonymous with market liberalisation. Trade can take place under different policy regimes. Market liberalisation is one trade policy regime; others can include different degrees of state regulation and control, protection and subsidies. The newly published World Development Report 2008 *Agriculture for Development* appears to favour trade and market liberalisation, but also makes a case for protection (p 112) and makes a strong call for strengthening the role of the state in order to use agriculture as a tool for poverty reduction and development.

In most developing countries, producers supply three different markets, namely *the domestic traditional markets, the modern urban market and the export market* (Narrod et al., 2007). How to get different markets to work for the poor is one of the major challenges in agricultural development. According to the World Bank (2007b: 1), *three of every four people in developing countries live in rural areas – 2,1 billion living on less than \$2 a day and 880 million on less than \$1 a day – and most depend on agriculture for their livelihoods*. Agriculture is a sector where Africa has products that can be exported and have the potential to increase production. In many African countries small farmers say that they could have produced much more if there was a market giving a fair price for their products. They very much want to be connected to markets. Farmers in the least developed African countries have had problems competing both in their modern urban home markets and definitely internationally (DFID, 2002). What low-income African countries have to offer is in most cases agricultural products. But dumping, subsidized import and food relief tend to constrain whatever chance African farmers have to access markets. The food relief situation might change because of the last years' increased prices of food. Regarding the export market, food safety control as relates to high consumer concerns and high retailer requirements, imposed on suppliers constrained market access (WB, 2006). However, the world food and agriculture situation is currently changing by new driving forces such as climate change, high energy prices, biofuels, urbanisation, transforming food consumption and increasing food prices (von Braun, 2007). Therefore, it is difficult to predict how market access and trade will develop in the future. Von Braun (2007) explains the current price increases with slow-growing supply, low stocks and supply shocks at the same time as the world is facing rising demands for feed, food and fuel. It is also difficult to assess how food price increases will impact on the poor rural farmer households. World market prices of wheat, meat and milk have tripled from 2000 to 2008, and since 2005 there has been a general 75% increase in world market food prices (www.ifpri.org, April, 2008). There has been a call for farmer gate price increases as a way of increasing the income of poor farmers. However, there is not much evidence in favour of the idea that higher farm prices will contribute towards poor farmers increasing their income since poor farmer households often are net buyers of food (von Braun, 2007).

Developing countries are demanding market access to international markets - not only for commercial and better-off farmers, but also for small holders. In particular small-holders who want to access the new emerging food markets face problems in meeting the food safety and quality standards as well as in ensuring the delivery of regular supplies to their buyers (Narrod et al., 2007). The World Development Report (2007a: 128) gives an overview of public and private options for strengthening farmer links to markets.

Table 1. Public and private options for strengthening farmer links to the market

Issue	Public sector		Private sector
	Public investments	Policy environment	
Lack of access to markets	Invest in education, rural infrastructure (roads, markets, electricity, irrigation); support formation of producer organizations	Liberalize domestic trade; foster development of input and credit markets	Assist farmers in forming producer organizations
Weak technical capacity	Support market-oriented extension	Foster environment for private extension to emerge	Provide extension and key inputs to farmers
Meeting quality standards	Support farmer training on good agricultural practices for quality enhancement and food safety	Establish grades and standards	Supply inputs and train farmers on quality management and food safety
Meeting contract conditions	Train firms in contract design and management; train farmers on their rights and obligations	Foster institutions for dispute resolution; strengthen producer organizations	Foster trust; develop contracts that are self-enforcing
Farmer exposure to risk	Foster development of commodity and futures exchanges; train firms on use of market instruments to hedge risk	Create enabling environment for insurance market	Use contracts that share risk equally among parties; assist farmers to access insurance

Source: Adapted from World Bank 2007e.

The above Table shows that access to markets is not enough. There are several other constraints that need to be overcome such as technical capacity and knowledge, meeting quality standards, meeting contract conditions and coping with risks. The World Bank (2007a) recommends public-private partnerships (PPP) as a way to address these constraints as well as strong producer organisations to achieve scale and market power. In this study, we will focus on the import of flowers from Africa to Norway and assess how the private sector in Norway (*Mester Grønn*) has invested in the import of Fairtrade roses from Africa to Norway. In this regard, a holistic market chain approach is a key.

IMPORT OF AGRICULTURAL PRODUCTS FROM AFRICA TO NORWAY

International Development Secretary Hilary Benn asked consumers to aid "social justice" on Valentine's Day. The minister told a sustainable food conference that emissions produced by growing flowers in Kenya and flying them to the U.K. can be less than a fifth of those grown in heated and lighted greenhouses in Holland. People want to buy ethically and do their bit for climate change, but often don't realise that they can support developing countries and reduce carbon emissions," he said. "Recent research shows that flowers flown from Africa can use less energy overall than those produced in Europe because they're not grown in heated greenhouses. "This is about social justice and making it easier, not harder, for African people to make a decent living." Mr Benn said: "Climate change is hugely important to the future of developed and developing countries but if we boycott goods flown from Africa we deny the poor the chance to grow, their chance to educate their children and stay healthy." It is estimated that almost a third of the U.K.'s imported flowers come from Kenya, with about 70,000 people, most of them women, working on the country's flower farms (news.bbc.co.uk/2/hi/uk_news/politics/6356383.stm, February, 2007)

The last round of the World Trade Organisation (WTO) did not offer much when it comes to African farmers. What will happen with the WTO negotiations is difficult to predict as efforts to find solutions and compromises have not succeeded. Highly recognised influentials such as Stiglitz and Collier ask for reforms in the WTO system in order to make trade fairer and make a difference for the bottom billion. Collier (2007) states that WTO functions badly regarding promoting development because it is designed for bargaining - and the bottom billion have no

place in a market place for bargaining. Collier suggests that each round of the WTO negotiations should start with reducing trade barriers against the bottom billion in an unreciprocated way adding *transfer of benefits* to WTO's current negotiation mandate. When Brazil's President Lula visited Norway in September 2007, he challenged the government on its agricultural subsidy policy. Norway is perceived as a supporter of EU and USA's protectionism in the WTO negotiations (Sommerfelt, 2006; Haug, 2007; Germiso, Bjørnsen & Heggen, 2007).

According to the generalized system of preferences for developing countries (GSP) it is possible to give trade preferences based on objective criteria, for example one can use the level of poverty or income as criteria for trade preferences (Melchior, 2005). The LDCs obtained zero tariffs for the import of agricultural products to Norway from July 1, 2002 with a monitoring and safeguard measure to protect Norwegian grain and fodder production from negative impacts of import. In addition to the LDCs, 14 other low-income countries were added to the zero-tariff list in 2008 (St.prp.no 1, 2008).

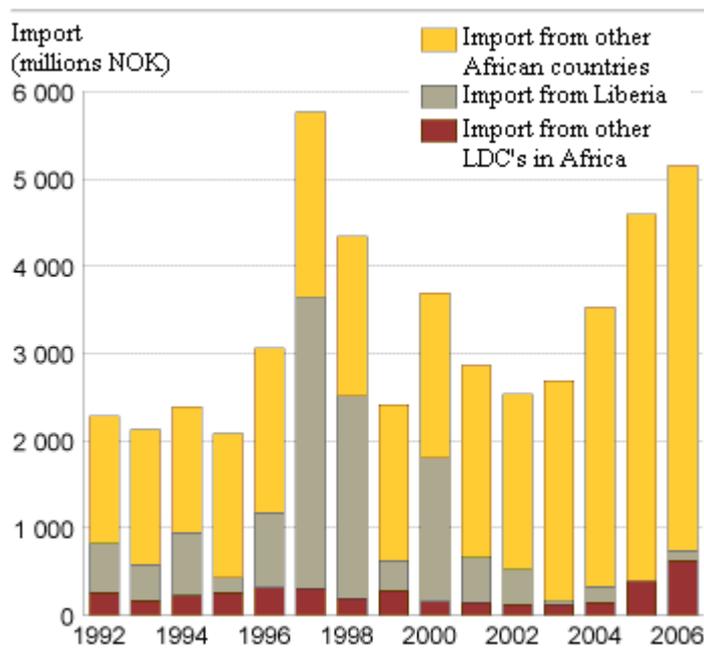
The largest limitation for many developing countries is the lack of benefiting from trade preferences, as access to markets is not enough. Norway scores very poorly on trade rankings such as the Commitment to Development Index (CDI). Norway, Switzerland and Japan are at the bottom of this list. Why is Norway ranked as one of the poorest performers? The explanation given by CDI is the high protection of Norwegian agricultural products: *Norway has a small and open economy, it is therefore dependent on tariffs and legal and administrative tariff barriers to secure own production, both high tariffs on agricultural products and high agricultural subsidies make it difficult for other countries to penetrate the Norwegian market.* On the other hand, according to CDI, Norway has low barriers on textiles and apparel. Norway is actually ranked as number one when it comes to the low barriers against apparel and textiles.

Norway also scores poorly on the trade indicators included in the Sustainable Development Index developed by Statistics Norway. Norwegian trade with Africa is particularly low. In the mid nineties, the total import from Africa constituted about 2% and had fallen to 1% in 2006 (Brunvoll, Hass & Homstvedt, 2007). The imports from the LDCs in Africa, except Liberia (excluded because of the international shipping register), constituted in 2006 of only 0.15 % of the total import to Norway. Total import from all LDCs in 2006 was approximately 0.3%. More was imported from Bangladesh alone than from all the 34 LDCs in Africa (Brunvoll, Hass & Homstvedt, 2007). According to Germiso, Bjørnsen & Heggen (2007), Norway imported cereals from EU/Efta amounting to NOK 2,6 billion in 2006 while import of cereals from developing countries amounted to NOK 80 million. Several of the Norwegian civil society organisations are challenging the governments when it comes to shifting the import of agricultural products in Norway away from developed countries and in favour of low income countries in Africa.

Maybe it was because of these poor statistics that Bob Geldof encouraged Norway in a meeting with Erik Solheim in January 2007, to go in the forefront for a trade plan for Africa. It is not necessarily said that there is a direct connection between increased import of products from Africa to Norway and poverty reduction in Africa. Norway is also not necessarily such an interesting and promising market for Africa, being far away and with a small market and/or few consumers. This is, however, no excuse for why Norway should be the poorest performer in the OECD group. Besides measuring the proportions of how much Norway and other rich

countries import from Africa, one should also evaluate to what degree increased trade leads to wanted results in relation to poverty reduction.

Table 2. Trade with African countries



Source: Statistics Norway

The total import to Norway from developing countries and also from LDCs increased from 2005 to 2006. Of the total import from developing countries, China accounted for 38% (Brunvoll, Hass & Homstvedt, 2007). The total import from LDCs in 2006 amounted to NOK 1.293 million or 0,3 % of the total import to Norway – where 58% came from LDCs in Africa (34 countries) (ibid). Import of textiles/clothes from Bangladesh accounted for 36 % of the Norwegian import from LDCs (ibid).

Table 3. Import to Norway from Least Developed Countries in 2006 (Mæstad, 2005, 2007).

Country	Value of import (NOK billion)	(%)
All LDC	1 085	100,0
Bangladesh	463	42,7
Congo	156	14,4
Liberia	116	10,7
Ethiopia	88	8,1
Mauritania	63	5,8
Kambodsja	60	5,5
Tanzania	45	4,1
Angola	43	4,0
Uganda	12	1,1

Norway imports 80% of its sugar from the EU, particularly from Denmark (Mæstad, 2005, 2007). Sugar is a product that could be grown and imported from low-income countries in, among others, Africa. Import of sugar to Norway has been an ongoing discussion for many years. However, we will not address this discussion in this study.

Table 4. Sugar import to Norway in 2006 (Mæstad, 2005, 2007).

	Total	EU	Denmark	Developing countries
Raw sugar	7	7	5	1
Refined & powdered sugar	43	43	38	0
Sugar	406	406	322	0
Total	456	456	365	1

In 2006, 30% of the cut flower import to Norway came from developing countries whereas 23% from LDCs (Mæstad, 2005, 2007). The proportion of cut flowers originating in developing countries has been increasing in Norway and this increase is explained by zero tariffs for LDC, high quality of cut flower imports from Africa, efficiency in the marketing process, interest among consumers and the willingness by the private sector in Norway such as *Mester Grønn* to take risks and invest in import from LDCs in Africa. *Mester Grønn* is a Norwegian chain of flower shops. *Mester Grønn* is owned and run by Erling J. Ølstad and Ola K. Ølstad. There are 81 *Mester Grønn* flower shops in Norway, with approximately 950 mostly part-time employees. 88% of the employees are female. (mestergrønn.no, April 2008). *Mester Grønn* imports roses from Tanzania, Kenya and Ethiopia. Approximately 42% of *Mester Grønn's* rose business is sold as Fairtrade certified roses, but all roses sold by Mester Grønn AS come from Fairtrade certified farms. *Omniflora*, a Fairtrade certified wholesaler owned by Finnlay Flower (a farm in Kenya), facilitates the imports of Fairtrade roses to *Mester Grønn* by assisting with logistics. *Omniflora* is the connecting link between the rose producers in Kenya and Tanzania and *Mester Grønn*, which makes the business very effective and thereby allows *Mester Grønn* to operate with a low buffer line of 2-3%. *Mester Grønn* imports directly from farms in Ethiopia, which secures the farmer a guaranteed sale of 1/3 of the production (Erling Ølstad, personal communication, April, 2008).

Table 5. Cut flower import to Norway in 2006 (Mæstad, 2005, 2007).

	Import value (NOK million)	%
Total	297	100,0
EU		
Netherlands	198	66,7
other EU countries	10	3,4
Developing countries	20	6,7
LDC		
Tanzania	41	13,8
Ethiopia	13	4,4
Uganda	9	3,0
Zambia	1	0,3
Other	5	1,7

NORWEGIAN POLICIES REGARDING TRADE AND DEVELOPMENT

Norway will make special efforts to ensure that trade and globalisation benefits the weakest countries and population groups, empower women and are environmentally sustainable (MFA, 2007b)

The Norwegian Government has recently published two new policy documents reflecting the Government's effort to put focus on the importance of trade for development. The first of these two documents is a report titled *Developing countries market access to Norway*. This report is the result of efforts of a working group appointed by the Ministry of Foreign Affairs in 2005. The report is partly based on another report from 2005, NUPI's (Norwegian Institute for International Affairs) revision of the Norwegian General System of Preferences (GPS) in Norway. One recommendation from the working group was that 14 new low-income countries should be included with the 50 LDCs in the zero-tariff system. This recommendation was implemented in 2008. There are 68 low-income countries (BNI per inhabitant under 825 USD) and 50 of these are classified as LDC (MFA, 2007a). The countries recommended to be included are Ivory Coast, Ghana, Kenya, Cameroon, the Democratic Republic of Congo and Zimbabwe. Other countries such as India, Vietnam, Nigeria and Pakistan are not included because of their high number of inhabitants (over 75 million).

The Norwegian Ministry of Foreign Affairs published in November 2007 Norway's Action Plan "Aid for Trade". This Action Plan aims at better cooperation with developing countries in their efforts to achieve economic growth and poverty reduction through increased participation in international trade. In the foreword of the Action Plan, it is stated that *Norway will make special efforts to ensure that trade and globalisation benefit the weakest countries and population groups, empower women and are environmentally sustainable (MFA, 2007b)*. The Action Plan states that market access is not a sufficient condition to get poor countries to increase their trade performances.

Both the Action Plan and the working group report mention import of flowers from Africa to Norway as success stories when it comes to utilising the zero-tariff opportunity. The Aid for Trade Action Plan outlines three priority areas for Norway, namely *good governance* in relation to trade, *women's* involvement in trade, and increased focus on *regional trade* opportunities. The Aid for Trade Action Plan also highlights:

- Increased support to fair trade initiatives, both bilaterally and multilaterally, through organisations such as the International Trade Centre (ITC) and the International Federation of Organic Agriculture Movements (IFOAM)
- Support to the International Labour Organization's (ILO) work on joint international regulations and norms on labour standards
- Increased information and awareness raising on fair and responsible trade in cooperation with relevant Norwegian stakeholders.

The Aid for Trade Action Plan does not really focus on how to increase import of products from LDCs and other low-income countries to Norway.

PRODUCTION OF ROSES IN NORWAY

Information in this section has been provided by consultant Sidsel Bøckman, *Norsk Gartnerforbund* through personal communication, March 2008.

Norwegian rose production is impacted by the increase in imported roses especially from East Africa during the last couple of years. The acreage for rose production in Norway has decreased from 14,5 ha in the period 2005/06 to 9,6 ha in 2008; from 2007 to 2008, the acreage decreased by 1,1 ha. There are 30 rose growers in Norway. Some producers grow exclusively roses on a relatively large area, while others only have a small plot together with other crops in a greenhouse. The largest rose farm in Norway is about 15.000 m² or 1,5 ha, while the smallest rose producer in Norway has about 126 m² or 0,0125 ha. An average rose producer in Norway has 3.300 m². Norwegian production is about 25 million stems of roses per year.

Because of the relatively new competition from East Africa there are several strategic adjustments taking place both on individual farms and at the national level. Even though the rose production area is decreasing in Norway, the total area of greenhouse production in Norway remains constant. This is because there are new demands in the Norwegian market. Potted plants for outside growing, greenhouse produced vegetables, different herbs and special salads are all highly attractive crops on the Norwegian market and the demand exceeds the production. Some rose producers therefore choose to restructure their production to more attractive crops.

Another structural adjustment due to increased rose import is the change from the present production of both small headed and large headed roses to exclusively large headed, long stemmed, robust roses. These types of roses require more space in a greenhouse but fetch a better price on the market. The red coloured rose has always been the focus of production in Norway. Norway has a comparative advantage compared to production in East Africa because the red colour is hard to produce in areas with a lot of light. The red roses produced in tropical areas are often blackened because of too much and too strong light.

The Norwegian rose growers produce exclusively for the Norwegian market. Often the wholesalers have an agreement with only one supplier which often results in many producers having approximately 20 different varieties of roses in their production. Figure 6 and 7 below show the relationship between import of roses and Norwegian production in the years 1996-2006 (developed by *Norsk Gartnerforbund*, April 2008).

Table 6. Cut roses, Norwegian production and import in volume

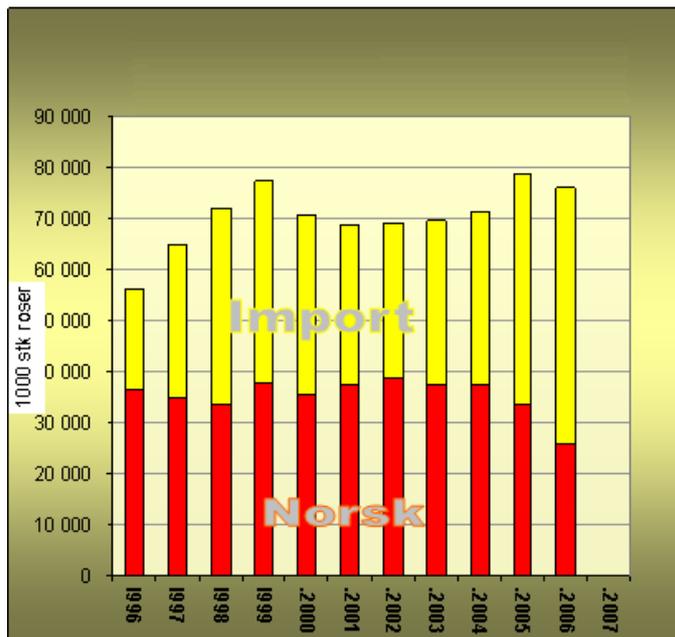
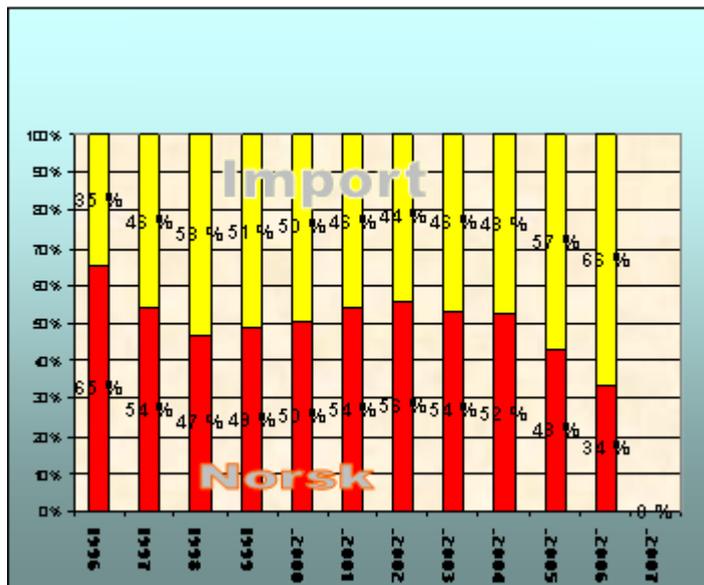


Table 7. Sale of cut roses in Norway, market share Norwegian produced and import



FAIRTRADE AND CERTIFICATION

Fairtrade is a trading partnership, based on dialogue, transparency and respect that seeks greater equity in international trade. It contributes to sustainable development by offering better trading conditions to, and securing their rights of, disadvantaged producers and workers - especially in the South (www.fairtrade.net/about_fairtrade.html April, 2008)

Fairtrade started as a partnership between non-profit importers, retailers in the North and small-scale producers in developing countries in the fifties. Many producers were at that time struggling with low market prices and high dependence on middlemen. In the post-World War II period several Alternative Trade Organisations (ATOs) in the North worked to ensure that benefits of reconstruction and economic growth were extended to resource poor producers in the developing world, which became the foundation for Fairtrade (www.fairtrade.net/about_fairtrade.html April, 2008; Charman & Jalakasi, 2008).

In 1989, Max Havelaar was created as a label by a Dutch ATO called *Solidaridad* as a reaction to the falling coffee prices, and the struggle of Mexican farmer to provide a decent livelihood for their families. The Fairtrade label was created to increase sales without compromising consumer's trust in Fairtrade products and in their origin. The label Max Havelaar guarantees that the products meet certain labour and environmental standards. After the success of this labelling organisation, 20 similar labelling initiatives have started throughout the world, one of them being Max Havelaar in Norway.

The Fairtrade Labelling Organisation (FLO) was established in 1997. FLO is an umbrella organisation that includes 20 Fairtrade labelling initiatives (like Max Havelaar Norway) and producer networks that represent Fairtrade Certified Producers (like the African Fairtrade Network (AFN)) in the South. FLO International develops and reviews the standards for fair trade and also assists producers with certification and facilitates market access. The inspections and monitoring of the Fairtrade certified producer organisations and their traders are done by FLO-CERT, which is an independent International Certification Company (www.fairtrade.net/about_us.html, April, 2008; www.flo-cert.net, April, 2008).

In Norway, the certification arrangement is administered by *Fairtrade Max Havelaar Norway*. Fairtrade Max Havelaar does not buy or sell products, but labels products that are traded in agreement with the international standards for fair trade set by FLO. Max Havelaar is a non-profit organisation. Strict control mechanisms secure the fair trade standards and control the value-chain from the producer to the consumer (www.maxhavelaar.no/Internett/Om_Fairtrade/, March, 2008).

According to Max Havelaar Norway fair trade means:

A decent salary. When world market prices for commodities are low, fair trade is particularly important

A new model for trade based on the "triple bottom line" – proper trade conditions for small farmers and workers, sustainable environment and profitability for all parts of the production chain.

A guarantee that clearly defined criteria are followed in the production and trade of agricultural products.

Producers benefit in two main ways: through a Fairtrade Minimum Price and a Fairtrade Premium. The Minimum Price ensures production of Fairtrade products. The Fairtrade Premium is paid in addition to the product price (minimum or market price, depending which is highest). The Premium is paid to the producers and funded by the buyers of Fairtrade products. In case of hired labour (like workers on rose farms) the premium is not paid to farm management, but to a joint entity (elected group of workers that manage the funds). An example of such a joint entity is the Kiliflora Workers Development Fund (KWDF) at *Kiliflora* rose farms presented below. The Fairtrade Premium is intended to benefit the workers, their families and their communities (www.fairtrade.net, March, 2008).

The points of reference for Fairtrade Certification are the Fairtrade Standards. These standards are developed by the FLO Standards Committee, in which stakeholders from FLO's member organizations, producer organizations, traders and external experts participate. The Fairtrade Certification is run by an autonomous organization, FLO-CERT which, among other activities, coordinates all the inspections of producers and traders.

There are two different standards that apply to the producer and the trader, namely the Generic Standards and the Product Standards; the Product Standards include the Fairtrade Minimum Price and Premium.

The Generic Standards include (FLO, 2007):

- A guaranteed minimum price considered as fair to producers.
- A Fairtrade Premium that the producer must invest in projects enhancing social, economic and environmental development.
- The standards strive to be mutually beneficial towards developing long term trading relationships.
- A clear set of minimum and developmental criteria and objectives for social, economic and environmental sustainability.

As mentioned, there is one set of Generic Standards for producers and one set for traders. There are two types of generic producer standards: those for small farmers' organisations and those for hired labour situations.

Regarding rose production in East Africa, it is the Generic Standards for hired labour situations that apply. They include standards for social development (freedom of discrimination, freedom of labour, freedom of association and collective bargaining, conditions of employment and occupational health and safety), economic development and environmental development (impact assessment, planning and monitoring, agrochemicals, waste, soil and water, fire, genetically modified organisms (GMOs)).

The producers must also follow standards specific to their products, referred to as Product Standards. Each Fairtrade product has its own set of standards. There are different standards for bananas, other fresh fruit, fruit juices, wine grapes, tea, flower and plants, and sport balls etc. Rose production must follow the standards set for flowers and plants. These include separate conditions for social, economic and environmental development related to the production of flowers and plants and also trade standards for flowers and plants which includes the chain of supply, long term and stable relationships, prices and premiums and information on rights and requirements.

Table 8. Where to find Fairtrade products in shops in Norway (www.maxhavelaar.no, April, 2008).

Her finner du 5 produkter eller mer:	Kaffe	Sukker	Juice	Bananer	Ris	T�	Annen Frukt	Kakao	�jokolade	Honning	Risikaker	Roser	Vin	Bomull	Frukt�l
Meny	A	A	A	A	A	A	N	A	A	N	A			N	A
Centra	A	A	A	A	N	A	N	A	N	N	N			A	A
Ultra	A	A	A	A	A	A	N	A	A	A	A			A	A
COOP Mega		A	A	N	A	N		A	A	A	A				
Eurospar	A	A	A	A	N	N	N	A	N	N	N				
Drageset	A	A	A	A		A									
Safari	A	A	A	A		A									
Jacobs	A	A	A	A		A									
Lidl	A	A	A			A			A						
ICA Maxi	A	A	A			A						N			
ICA Supermarked	A	A	N			N						N			
ICA N�r	A		A			N									
ICA Sparmat	A	A													
Spar	A	A	A	N	N	N		N	N	N	N				
CC Mat	A	A	A	N		A		N							
Smart Club	A	A	N	N	N			N	N	N	N				
Joker	A	A	N			N	N								
Kiwi	A	A		N											
N�r-mat	A			N			N								
Rema 1000	A	A		N											
Rimi	A	A													
COOP Obs		A	N	N	N	N		N	N	N	N				
Bunnpris	A	N	N	N											
Butikkringen �stlandet AS	A	A													
OK-kjeden	A	A													
Livi	A	A													
Deli DeLuca	A														
Helios	A	N	N	N		A			A		N				
Helsekostbutikker	N		N			N			N						
Jysk															A
Mester Gr�nn												A			
Vinmonopolet													A		

A - alle butikker N - noen butikker

It is a bit early to say to what degree Fairtrade is the way to go as the experiences are somewhat mixed, but Fairtrade should be given a chance to prove what it is worth. When it comes to import of Fairtrade roses from Tanzania to Norway by *Mester Gr nn*, the social, economic and environmental impact of the rose production appears to be very satisfactory.

FLOWER PRODUCTION IN AFRICA

More and better jobs: Many high value activities such as horticulture and dairy farming are labour intensive and generate substantial employment, with significant poverty reduction effects. But agriculture alone cannot relieve rural poverty; rural non-farm employment is also important. Growth in rural non-farm employment is closely linked to growth in agriculture, but it increasingly also originates through urban-rural contracting, especially closer to the cities. The policy priority is to massively invest in rural education to provide educational and skill opportunities relevant to emerging job markets, and to develop labour regulations appropriate to rural working conditions (World Bank, 2007c).

Flower production in Africa has developed since the 1980s and 1990s because of market opportunities and favourable prices in Europe. African countries like Kenya, Tanzania, Uganda and Ethiopia have competitive advantages that make them ideal countries for flower and especially rose production. These countries have stable climate conditions and high altitudes, which is conducive for rose production. The costs are generally much lower than in Europe regarding infrastructure, taxes, and maybe most important labour costs. These countries also have availability of water, land and labour.

Kenya was the first country to succeed in rose production and is today the largest rose producer in Africa. Kenya started in the 1980s with the major development in the sector taking place during the 1990s and in 2000. Today, approximately 2.000 ha are used for rose production in Kenya, which constitutes for about 70-75% of total flower production in Africa (Kidron, 2008). Kenya has managed to build an infrastructure suitable for rose production and Jomo Kenyatta International Airport (JKIA) in Nairobi is the airport that freights almost all roses produced in Tanzania and Uganda. The roses produced in Ethiopia are freighted from Bole International Airport in Addis Ababa.

Uganda and Tanzania started to grow flowers at the same time as Kenya, in the early 1990s. However, they have never reached the same acreage as Kenya. Tanzania and Uganda have 120 to 150 ha each in cut flower production. One view is that this is not enough to reach the critical mass needed to optimize the cost for logistics and import of fertilisers and chemicals. However, Tanzania is still expanding after over 20 years of rose production. Zimbabwe was a relatively large rose producer with 600 ha, but has over the last 2-3 years lost almost all production because of the political situation. South Africa also produces roses, but since they are quite far away from the important markets they are almost exclusively producing for the domestic market.

Rose production is a labour-, water- and capital-intensive sector, basically 'imported' to African countries. Many people have been critical to this new industry. Because of the rapid expansion of rose production in Africa, concerns about workers' welfare and environmental sustainability have been raised by international media. The critical comments include concerns regarding workers' conditions such as long working hours, low pay, gender discrimination and hazardous working conditions because of chemicals (Kidron, 2008). Rose production uses a lot of water and producers are dependent on reliable water sources.

The area surrounding Lake Naivasha in Kenya is one of the largest rose production areas in Kenya. Several studies show that the flower production in the area poses several ecological problems to the lake, including loss of water and pollution as a result of heavy use of

pesticides and fertilisers (Evarard and Harper, 2002). Unsustainable water use because of poor infrastructure and overpopulation are also resulting in ecological degradation of the lake. The population in the area has increased rapidly because many seek employment at the approximately 30 flower farms in the area (Food and Water Watch, 2008). According to Erling Ølstad, (personal communication, April 2008) the environmental degradation of the lake could have been avoided if certification of the flower farms surrounding Lake Naivasha would include water management, purification and recycling of water used in production and by their employees.

The rose market in Europe increasingly demands both social and environmental certifications. Increasing quantities of exported roses go to major supermarket chains in Europe through direct imports while the numbers of roses that are passing through the auctions in the Netherlands are decreasing. The major supermarkets often have more capacity than smaller shops to follow up their producers and tend to require certifications.

A study conducted by the Institute of Development Studies (IDS) (McCulloch & Ota, 2002) has examined the impact of Kenyan horticulture on poverty reduction. The study examined households involved in horticulture and non-horticulture in rural and urban areas. The study found that *households involved in export horticulture are better off than those which are not, particularly in rural areas* (McCulloch & Ota; 2002:iii). Further, the study states that the horticulture industry has provided substantial employment, particularly to relatively low-income households and unmarried women. The horticultural export sector provides an important source of foreign exchange, generates substantial employment, and has contributed to the upgrading of agricultural production skills (McCulloch & Ota, 2002:29).

Small scale flower production in Kenya (B.K.G. Wold, personal communication, April 2008).

Many of the flower producers are huge commercial farms what we would call plantations, with many employees. However, in Kenya small-holders are also involved in flower production. The farmer organisation in Kenya has been able to facilitate a system where small-scale farmers join forces and establish groups of about 15 producers that commit themselves to produce sufficient quantities of roses and other flowers. The farmer organisation has negotiated a system where the farmer groups enter into a contract with the private sector through a middleman in Nairobi who supplies inputs such as seedlings and chemicals as well as training and makes the connection to the international market. The production of flowers takes place without greenhouses, just with simple shelters made out of leaves to provide shade. When the middleman in Nairobi gets a request from Europe for flower supply he will inform the small-scale farmers to have a certain volume of flowers ready at a certain date and at a certain price. So far the system appears to be working well and contributes towards an increased income level among the farmers involved.

ROSE PRODUCTION IN TANZANIA



Tree nursing project at Kiliflora rose farm Arusha, Tanzania. The project was made possible with the Fairtrade premium money (photo by Ingrid Ohna).

Rose production in Tanzania started in 1987 and has since expanded. Most of the production is located in northern Tanzania, in Arusha and Kilimanjaro. This is due to climate conditions (lower temperatures) and geographic location (high altitude). Even though Kilimanjaro International Airport (KIA) in Arusha could freight flowers to the European market, almost all flowers are transported to Nairobi and JKIA to be freighted by plane to Europe. The trip to Arusha is about four hours by truck. The altitude of the rose production area around Arusha and Kilimanjaro varies between 1200-1600 meters above sea level. Arusha and Kilimanjaro have since colonial times been high production areas, known for the favourable growing conditions. When rose farming was established in this area, many farms replaced old coffee, tea or sugar plantations (Semboja, Mbwelwa & Bonaventura, 2000). As other places in Africa, increasing market opportunities in developed countries and the availability of land, water and labour in Tanzania have been the most important reasons to invest in rose production. In comparison with traditional crops, the production of roses is capital and knowledge intensive giving high yields and profitable returns. The rose industry has become important for Tanzania as a source of foreign exchange to the country. The industry has also improved the infrastructure and led to general economic development in the area (Semboja, Mbwelwa & Bonaventura, 2000).

Most rose farms in Tanzania are owned and managed by expatriates. The initial investment costs are high and since the industry is fairly new to Tanzania, there is still a lack of national expertise in the sector. Compared to Ethiopia and Kenya, the Tanzanian Government has been a passive actor, not playing the role of facilitator but rather slowing down the development with high levels of bureaucracy. The ILO report (Semboja, Mbwelwa & Bonaventura, 2000) found that most of the farms in the study were not satisfied with their relation to the Government. The Tanzanian Government has had little involvement in the industry and has not provided investment incentives such as favourable loans as in Ethiopia. The flower industry in Tanzania has become an example of the private sector being capable of organizing itself and making its own arrangements in order to meet international standards (ibid).

The Tanzanian Horticulture Association (TAHA) is actively working to support the rose production in Tanzania. According to TAHA (2008) horticulture is the fastest growing non-traditional sector in Tanzania, and their core activity is to lobby the government and stakeholders for the interests of its members. Out of 18 flower farms in Arusha only two are owned by locals. The rest is owned by foreigners mainly of Dutch origin. The TAHA members' farms employ approx 6,000 people, of which 65% are women (Jacqueline Mkindi, Executive Director TAHA, personal communication, April, 2008) TAHA lobbies the government on issues like infrastructure, import of chemicals, taxes etc. The organisation gives technical support to their members through training. Most of the projects are developed in cooperation with the Dutch, American and Tanzanian Governments (TAHA, 2008). The projects include plant breeders' rights, pesticide registration, training for export agriculture, promotion of the flower sector, integrated pest management (IPM), sanitation and health, promotion of small growers (especially in the Southern Highlands, region of Iringa). TAHA is also in the process of developing a harmonized code of conduct for the horticulture sector in Tanzania.

When talking to people in Arusha, they give credit to rose producers for creating job opportunities and the majority of people in Arusha consider the flower industry as one of the very important sectors which contributes to the development of the region and the nearby regions like Manyara and Kilimanjaro. The rose producers have a good reputation in the communities in Arusha and Kilimanjaro and they are known for their social engagement, implementing different projects in different communities. However, some people lacking experience from rose farms are concerned about the health and security of the workers because of rumours about poor working conditions and the heavy use of pesticides. This is not a big concern among the workers actually working on the farms. The workers on the farms expressed that if they were exposed to harmful pesticides, it was because they chose not to use the protection gear or follow the safety manual, and not because the farms didn't provide it. A concern was expressed in relation to pesticide use on fresh vegetables, produced by small-scale farmers, where people in the area think no precautions are being taken in the application by the growers.

Working at the rose farms provides secure and stable income for the workers. "Without flower farms in Arusha criminal cases would become ten times what we see now", a comment from an old man named Ole Saigurani from Arusha. He says the flower industry has helped in absorbing a large number of young men and women who otherwise would have been jobless in town.

Through working experience from flower farms, many Tanzanians have learned to invest in flower production. Few have managed to produce cut flowers for export, but many have initiated the production of tropical flower seeds as out-growers. This kind of business is highly preferred because the grower is assured the price of his crop before growing. The living standard of many has been improved through contracted farming of tropical flower seeds. Another popular business which has been influenced by the flower industry is nurseries of garden plants. When you drive along Nairobi Road and other roads in Arusha town one can easily realise the number of local managed nurseries of garden plants. The nursery business is borrowing most of the skills and new plant materials from commercial flower farms.

Fair trade at Kiliflora

Several of the rose producers in the Arusha area are Fairtrade certified. In this study we will present data obtained from Kiliflora rose farms. *Mester Grønn* is the largest importer of Fairtrade roses in Norway and imports these through *Omniflora*. *Omniflora* is a Fairtrade licensed wholesaler that assists *Mester Grønn* with the logistical details of transport from Nairobi to Norway. *Mester Grønn* imports roses exclusively from Kiliflora farms in Arusha. Data presented below have been gathered from a field visit to Kiliflora farms and Multiflower LDT in Arusha.

Kiliflora consists of two farms, Loliondo and Nduruma, together employing 1,151 persons. Kiliflora was one of the first rose producers in the area that applied for the Fairtrade standard. By doing so Kiliflora is committed to sustain standards set by the Fairtrade Labelling Organization (FLO) related to socio-economic conditions for workers and environmental sustainability. One week every year a team of inspectors from FLO-CERT, an independent international certification company, visits the Fairtrade licensed farms to undertake inspections. According to FLO, *“the independence of the inspections ensures that the Fairtrade Minimum Price reaches the producers and that the Fairtrade Certification Mark is only used on products coming from Fairtrade Certified Producers”* (www.fairtrade.net/, April, 2008). During the week of inspections the team goes through all standards in relation to production, socio-economic conditions of the workers and environmental impact of production. Being a Fairtrade licensed farm requires more from the farm's management. At Kiliflora, one full-time employee handles the administration of the different certifications. Besides Fairtrade, the certifications include the Floriculture Environment Programme (MPS) and the Flower Label programme (FLP). In addition to the employee working on the administration of the certifications, Kiliflora has two employees working with the Kiliflora Workers Development Fund (KWDF), managing projects with the Fairtrade Premium money. The projects are developed on the needs identified using Participatory Rural Appraisal and also by following up requests from workers during the year. Kiliflora has, because of the different projects in nearby communities, twice been given the prize “Best employer of the year” in Tanzania. This prize is very prestigious and is forwarded by the President.

Projects initiated by the KWDF on the basis of Fairtrade Premium money:

Tree planting: A tree nursing project is located at Loliondo farm. Loliondo farm also has a plot demonstrating how trees should be planted. Loliondo farm distributes trees to individuals for conservation and income generating purposes.

Bicycle project: 1,000 workers are given bicycles to simplify the commute between home and work.

Construction of two schools, one is to be opened this year

Evening secondary school for workers

Community water projects, provided water pumps for several villages

Compost systems on the two farms for organic soil improvements.

Improvement of dispensary

Distribution of mosquito nets

Knowledge and awareness programs for HIV/Aids, tailored classes and computer classes

Library construction

Employment and workers' organisations in Tanzania

All workers engaged in rose production in Tanzania have the opportunity to become a member of the Tanzanian Agriculture Workers Union (TAPAWU), which is a national labour union in Tanzania. At Kiliflora farms TAPAWU is well represented with a Women's Committee and an Environment, Health and Safety Committee. A study conducted by the ILO in 2000 of the cut flower industry in Tanzania (Semboja, Mbwelwa & Bonaventura, 2000), found that the cut flower industry (...) *has created jobs for women and provided additional income-earning opportunities for farm households* (Semboja, Mbwelwa & Bonaventura, 2000:4). The study also recognized a need for improving the national expertise in the sector and was concerned that the rose sector was “over-dependent” on expatriate consultants and managers (ibid). It seems that the rose producers also at present are relying on import of skilled labour rather than building knowledge capacity in Tanzania.

The rose industry generally employs more women than men. Jobs like harvesting, grading and packing are mostly done by women, while the men work with irrigation, spraying and other manual tasks. There is an over-representation of men in the skilled positions. Employment is normally divided into four groups: management, permanent skilled labour, permanent unskilled labour and casual labour.

Workers at Kiliflora responded that they were content with the labour conditions. Kiliflora farms were perceived to be attractive employers. All workers are provided with a labour contract. Kiliflora operates with two types of labour contracts, one for permanent workers and another for casual workers. The two contracts are similar, but casual contracts are for a specific time period. The daily wage is 1, 513 shillings, which equals 7, 67 NOK (www.dnbnor.no, March 2008) per day. 362 shillings per day are paid for housing allowance if housing is not provided. Permanent staff gets 46, 000 shillings per month, equivalent to 233 NOK per month (ibid). Persons hired for spraying have different labour contracts than the permanent or casual staff. Sprayers earn a higher wage and only work four hours per day. All workers get an annual leave of seven days after every three months (28 days pr year). Workers are paid for seven days of work, but only work six days a week. All female staff have the right of three months maternity leave every 36 months. Most take this together with the annual leave, meaning they return home for four months. The fathers get a three-day paternity leave of seven days after the birth. The farms employ approximately 25 people per ha. Kiliflora pays for schooling for the employees' children up to secondary school. Kiliflora also gives the opportunity for workers to take evening classes to be able to finish secondary school.

Challenges and opportunities

Rose production in Tanzania cannot measure itself with either Kenya or Ethiopia. However, the production is still expanding, and is an established actor in the international market for roses. Rose production in Tanzania still faces several constraints. Many of these challenges are connected to the relatively low production in Tanzania compared to for example Kenya and Ethiopia. There is a need to reach a “critical mass” to optimize rose production in Tanzania (Semboja, Mbwelwa & Bonaventura, 2000; Kidron, 2008). A higher rose production could help the industry in three ways: transportation, level of bureaucracy and inputs to production. Today, the rose producers in Arusha transport their roses to Nairobi because the production is not big enough to make use of KIA airport in Arusha. An increase in the export of roses would make it beneficial to use KIA, and this would reduce the transportation cost considerably. Second, it is likely that reaching a higher level of production

in the rose industry would relieve the high level of bureaucracy that many rose producers in Tanzania are facing today regarding shipping documents, taxes and general box handling. Third, it is expected that increased production of roses will create a greater demand for the import of producer inputs like chemicals. Today, much of these inputs are imported from Kenya making it more costly than if larger quantities would be imported. Supply of inputs like chemicals and fertilisers is at present in Tanzania about 20-25% more expensive than in Kenya (Kidron, 2008). On the other hand, the cost of production, mainly labour and land, is still lower in Tanzania than in Kenya. Kenya has the latest years experienced an increase in cost of land and labour. Fourth, market access and competition create uncertainty. The market for Fairtrade products is still small and it is difficult to predict how it will evolve e.g. to what extent consumers will be willing to pay more for Fairtrade products. It is also difficult to assess how competition with future producers like Ethiopia and China will impact on the profitability of rose production in Tanzania.

ROSE PRODUCTION IN ETHIOPIA



Women propagating at a rose farm in Ethiopia (photo by Ingrid Ohna).

The climatic conditions in Ethiopia are excellent for rose production, with high altitudes, warm days and cool nights. The area of Holleta, having the highest expansion in the sector, is located approximately 2, 000-2, 600 meters above sea level. The flower industry in Ethiopia is still young, but has had an exceptional start. It has already out-competed Tanzania and Uganda when it comes to size of production area and has also established a reputation in the international arena as high quality rose producers.

Ethiopia is very attractive for horticulture and especially rose production due to its climatic conditions, easy freight and logistics, low labour cost and a government willing to support the rose industry. The climatic conditions facilitate the production of large headed robust roses which are a product in demand. The Ethiopian Government is actively supporting the growth of rose production in Ethiopia. Through the Ethiopian Development Bank, the Government finances 70% of initial loans together with a three-year grazing period, giving rose producers space to increase the production before paying instalments on the loan. Investors are given a

five-year tax exemption, all imports are duty free and the Government also provides favourable land leases for investors in rose production. The rose producers in Ethiopia benefit from an efficient airport, and good and relatively short road distances from the flower producing areas to the airport. It is no surprise that the incentives provided by the Ethiopian Government are making the flower industry in Ethiopia attractive. These incentives also give opportunities to local businessmen to invest in the rose industry. The Government of Ethiopia expects that rose export could surpass coffee as the country's top earner within a few years, because of the rapid growing and heavy investments in this sector (EIU, 2007).

With regard to investment, there are several investment offices that facilitate both foreign and local investments in the flower industry. In Ethiopia, there is about 50-50 foreign and national investment. Investors mainly come from the Netherlands, Germany, India and Israel. However, both foreign and national owners hire expatriates from the Netherlands to provide technical expertise.

The rose sector faces several challenges as it is a new sector in the country. These challenges include poor infrastructure, shortage of construction materials, and delays in crucial imports (EIU 2007). For foreign investors, the fact that there are few foreign banks in Ethiopia has made the exchange control difficult, but as the flower and other industries in Ethiopia grow, it is expected that more foreign banks will be established in Ethiopia. Communication is also a problem in Ethiopia. Many producers have no access to Internet and are forced to set up offices in Addis Ababa to be able to communicate with dealers. This is not ideal in an industry where communication with the market is crucial.

The two most important stages in rose production are post-harvest handling and freight to ensure that high quality roses reach the market and the consumers in time. Ethiopia is currently struggling with post-harvest damages to roses, especially mechanical damage to the flower heads. These damages can be quite destructive for a company. This is partly because of untrained staff, lack of equipment, lack of proper cooling systems and proper boxes for transport (Kidron, 2008).

Employment and welfare

Unlike Tanzania where many of the flower farms were established on plantation land, the new production areas in the Oromia region of Ethiopia are established on waste land or in small agricultural production areas. Also, some eucalyptus plantations in the area have been converted to rose production. Many of the workers are from small-scale farm households, adding an extra income to the household. In addition to farmers in the area, the industry employs a substantial number of labour migrants. Small villages have developed in the area to house the migrant workers that seek employment on the many rose farms. The general opinion received from the workers at the flower farms is positive, because rose farms provide employment. Permanent employment and wages are seen by many as more attractive than the uncertainty involved in small-scale farming.

The Ethiopian rose industry has already faced problems in employing sufficient number of people in the rainy season. It is hard to get enough people to work in this season, because people are needed for their own farm work. Lack of work force might become a problem for the industry in the long run. Rose farms address this by giving their workers incentives in the form of bonuses and allowances which increases the welfare of the workers. However, when rumours spread that employment is available, more migrant workers might join in. As in

Tanzania, there is a problem of acquiring skilled staff and it seems that the farms prefer to hire staff from Europe or South Africa than train their own. Some of the rose farms requested that universities in Ethiopia should focus more on educating skilled graduates relevant for rose production.

There was greater variation among the farms visited in Ethiopia than in Tanzania. The general impression of the farms in Ethiopia was that they were bigger and cleaner. Yet, instead of having changing rooms attached to almost every greenhouse such as in Tanzania, changing rooms were rarely seen at many of the Ethiopian farms, and most of the farms visited did not have canteens.

Challenges and opportunities

The Government of Ethiopia is putting a tremendous effort to improve the high-value agricultural export sector in Ethiopia. Rose production has proven to be a huge success, but experts are questioning whether the industry will be able to keep up with the expected expansions in rose production. The rose industry is new to the country and with good conditions for investing in the business some believe that not all the producers will survive when the time comes to pay instalments on investment loans and taxes. Norwegian rose growers commented after visiting several rose farms in the Oromia district that there was a great variation in the quality of the roses produced at different farms, and they found it difficult to see how all of these were going to survive if production quality did not improve. Some had the opinion that in some cases it seemed that businessmen with no experience in the rose industry have invested heavily and might underestimate the importance of production quality and knowledge about the market mechanisms. The Ethiopian roses are, as mentioned, big headed with a long and delicate robust stem. These attributes make the flowers heavier and post-harvest handling becomes more important, because the big heads are vulnerable. The cost of transportation is therefore higher for an Ethiopian rose than a Tanzanian rose. But these attributes are also what makes the roses from Ethiopia so special.

Only one farm is Fairtrade certified in Ethiopia (Golden Rose Agrofarms Ltd) based on requirements from *Mester Grønn* AS, but many farms are aiming at getting Fairtrade certification. In Ethiopia, people have experience with Fairtrade coffee, and it is expected that farms will be certified for Fairtrade within a year. It seems from observations and talks with workers at several rose farms in the district of Oromia that most people are content working at the farms. Most workers have their own plot of land where they and other members of their household grow food crops. Some workers responded that the money earned at the flower farms were used for school fees and mostly “non-food” items, like cell-phones.

Ethiopian rose production is still struggling with 'teething troubles' like young industries often do. Among these are infrastructure, level of bureaucracy, and availability of inputs. Currently Ethiopia imports almost all the inputs needed. A box factory has been built to be able to supply the industry with transport boxes, but the quality was reported to be poor and harm the roses.

The environmental impacts of the production have not yet been given much attention in Ethiopia. It seems like the Government is mainly concerned with reaching Kenya in size of production. The many incentives for investment in the flower industry from the Government make the rose industry very attractive. But the European markets are demanding environmental certification, which forces the Ethiopian rose production to apply with

European standards. Rose production in Ethiopia is at present less environmentally friendly than in Tanzania and Kenya. Ethiopia is also starting to supply other markets than Europe such as Russia, the Middle East and Asia; these do not yet have the same requirements regarding environmental standards.

FLOWER IMPORT AND CLIMATE CHANGE – COMPARING ROSE PRODUCTION IN NORWAY AND TANZANIA

From a climate change perspective, a focus on food miles is appropriate as long as it can lead to reduce environmental impact for the entire life cycle of food products consumed in the UK. Food miles are blind to the social and economic benefits associated with trade in food, especially from developing countries. This reduces their utility as a standard for sustainable development decision-making (MacGregor & Vorley, 2007).

Rose production is the main source of emissions of greenhouse gas (GHG) compared to heating of greenhouses in Norway. In Tanzania, there are no heating costs related to rose production, but the main emissions of GHG from rose production in Tanzania are those related to the transport of the roses by air from Nairobi to Frankfurt. The roses produced in Tanzania are transported by truck from the production site in northern Tanzania to Nairobi and by truck from Frankfurt to Oslo.

Different methods can be used to calculate the GHG emissions from rose production. One difficulty is to assess the GHG emissions from electricity use in Norway. Electricity production in Norway is based on hydroelectric power, but in many years electricity from the other Nordic countries was imported to Norway during winter. Some of this electricity is based on fossil energy sources such as coal. Electricity on the Nordic market is traded through Nord Pool ASA (The Nordic Power Exchange) and electricity on the Nordic market is partly produced from fossil energy sources that give CO₂ emissions.

The emissions related to transport of roses as air cargo depend on the kind of airplanes used, whether cargo flights are used and to which degree the full cargo capacity of the flight was used. We have in this case used the assessment from the Institute of Transport Economics (TØI), Norway. Emissions from air traffic are not included in the Kyoto protocol, but are likely to be included in coming climate agreements. There is a question which weight factor to use for emissions from air traffic. TØI/CICERO have recently proposed that a weight factor of 1,8 should be used for the CO₂ emissions from air traffic because air traffic contributes to the formation of cirrus clouds that will have a heating effect.

Average energy use in greenhouses in Norway for rose production was calculated to be 981 kWh/m² (Norsk Gartnerforbund, 2006). The energy for lighting represents 60% of this energy. The Norwegian greenhouse area used for rose production is about 90.000 m². This corresponds to an average energy use of 88.290.000 kWh. The heating component is 35.316.000 kWh. Norwegian rose growers use gas, electricity and to a limited degree oil for heating. No biofuels are yet used in Norwegian rose production. The source of energy used depends on the price of the different types of energy. The use of gas in Norwegian rose

production is growing as the CO₂ produced in burning gas is used to enrich the atmosphere in the greenhouse so that more production is achieved.

We calculated the distribution of the amount of energy for heating coming from different sources. In 2005, the following distribution of heating sources was found in the whole greenhouse sector in Norway: electricity 42,8 %, natural gas 27%, propane 11,1% and oil 17,5%. We assume the same distribution occurs from heating energy sources in rose production. Based on this distribution it is possible to calculate kWh use from each of the heating energy sources:

Table 9. Energy used in rose production for heating in Norwegian green houses (based on distribution of energy in the overall greenhouse sector).

	kWh	Kg CO ₂ /MWh ¹	Ton CO ₂
Electricity	15.115.248		
Natural Gas	9.535.320	205	1.955
Propane	3.920.076	234	917
Oil	6.180.300	265	1.638
Total			4.510

¹Source: Norsk Petroleuminstitutt/SSB

Total electricity use in Norwegian rose production, including electricity for heating and lighting is 68.000.000 kWh. This corresponds to a CO₂ emission of 7.276 tonnes. This is based on emission of 107 g CO₂/ kWh and represents the average CO₂ emission for five years in the Nordic electricity market (Germiso, 2008). The Nordic energy market can be considered as one pool and the energy in this market is traded through *Nordpool*. Total CO₂ emission from Norwegian rose production is therefore 1.1786 tonnes which includes 4.510 tonnes from the use of fossil fuels and 7.276 tonnes from the use of electricity.

Norwegian rose production in 2005 was 33.537.537 roses according to *Norges Gartnerforbund*. This gives a CO₂ emission per rose of 0,35 kg CO₂ per rose when total CO₂ emission in Norwegian rose production is 11.786 tonnes.

We base our calculation of tropical rose production on the Tanzanian case when the roses are produced in Tanzania and transported to Norway by air from Nairobi to Frankfurt. The transport from Arusha to Nairobi and from Frankfurt to Oslo is done by truck. It is the air transport that gives the highest greenhouse gas emission in this case. It was calculated that the CO₂ emission for air transport was 0,10 kg CO₂ per rose. This calculation was based on the distance from Nairobi to Frankfurt of 6.320 km, an emission of 0,684 kg CO₂/tonne per km (Lian et al., 2007) and an import to Norway of 759 ton roses including the weight of the pallets of 29 tons. It was furthermore assumed that there are 45 roses per kg. This emission from air traffic can be corrected by a factor of 1, 8 since the emission of CO₂ in air traffic occurs at higher altitudes and thereby contributes more to global warming (Lian et al., 2007). However, this is not yet an internally recognized factor. If this factor is used it gives a CO₂ emission per rose of 0,18 kg CO₂ for air transport. The transport of the roses by truck from Arusha to Nairobi and from Frankfurt to Oslo corresponds to a CO₂ emission of 0,02 kg CO₂ per rose. This is based on a total transport distance of 1.700 km and an emission factor of 0,06 kg CO₂/ tonne per km (Lian et al., 2007). A truck carries a load of 10 ton including the weight of 1 ton of roses and the containers to protect the roses. This gives a total CO₂ emission for rose production in Tanzania and sale in Norway of 0,20 kg CO₂ per rose if the correction

factor of 1,8 is used for air traffic and 0.12 kg CO₂ per rose if this correction factor is not used. The emission per rose will however be higher if the cargo capacity of the plane is not fully utilised.

It is not possible to accurately calculate the GHG emissions from the two alternatives. The results will vary according to the assumptions and correction factors used. However, the results indicate that roses produced in Tanzania and transported to Norway by air have considerably lower emissions than roses produced in Norway. It was found that GHG for the roses produced Tanzania and sold on the Norwegian market varied from 0,12 to 0,20 kg CO₂ per rose whereas roses produced and sold in Norway have an emission of 0,35 kg CO₂ per rose

If roses produced in Africa could be transported to Norway by sea instead of by air, the greenhouse gas emission would be much less. According to Wangler (2006), air-freight has the highest global warming potential of all modes of transport.

LESSONS LEARNED FROM IMPORT OF FLOWERS FROM AFRICA TO NORWAY

Many small farmers would like to take advantage of the new income-generating opportunities presented by high value products (meat, milk, vegetables, fruits and flowers). There are, however, high barriers to market entry. Therefore, improved capacity is needed to address safety and quality standards as well as the large scales required by food processors and retailers (von Braun, 2007: 13)

Flowers from Africa (Kenya, Tanzania, Ethiopia and Uganda) are one of the very few agricultural products from low income countries that have really benefited from the zero-tariff system that Norway introduced for the least developed countries (LDC) in 2002. There are many reasons why flowers, basically roses, have managed to become a success story for international trade from Africa to Europe. WTO (Lamy, 2007) explains the success by factors such as cheap labour in LDCs, natural conditions conducive for rose production, effective technical support and flower production in the North often not being subsidised. Regarding import of roses to Norway, Erling Ølstad, in *Mester Grønn* (26.10.2007) states some of the same reasons as Lamy, but adds some more:

- Skilled management of production in Africa with a focus on quality
- Efficiency in the trading/transport process– *Mester Grønn* benefits from being included in a professional European trade network
- Willingness by the importer in Norway (e.g. *Mester Grønn*) to take risks and invest
- Social responsibility by the importer in Norway
- Fairtrade certification
- A market among consumers in Norway for both high quality and Fairtrade products (willingness to pay)
- Importers in Norway such as *Mester Grønn* being independent of Norwegian rose producers (e.g. *Gartnerforbundet, Gartnerhallen*)

Roses are imported products that avoid some of the strict food safety regulations in Norway since they are not edible. Also, roses are not met with the same scepticism as food items in the sense that roses do not "take the food away from the hungry Africans". Although food insecurity and hunger basically are a poverty problem, not a production problem – the popular view among many Norwegians is that Norway should not import food from Africa because Africa needs the food itself. However, since poverty and purchasing power are the main problems causing hunger and food insecurity, contributing towards income opportunities might be an effective way of decreasing poverty and food insecurity in Africa. To the degree that workers on rose plantations and small-scale rose producers earn a decent income from rose production, international marketing of roses contributes towards improving the livelihoods of poor people. The findings from the interviews with workers on flower farms in Tanzania and Ethiopia indicate that people employed on the rose farms contribute substantially towards increased income level in their households. It is attractive to be employed at a rose farm, in particular a Fairtrade certified rose farm. This finding corresponds to findings from Kenya where households involved in export horticulture were found to be better off than non-export-horticulture households and that in particular women from poor households benefited (McCulloch & Ota, 2002).

Although Norwegians can't eat flowers and thereby "do not take food away from the poor", there is another element of flower production that relates to luxury issues. Some people might claim that we do not really need flowers and that the land and water used in flower production could be better used by food production for the needy. Again, poor people need income to be able to access food. This said, there might be conflicts in relation to land and water use that we have not had the opportunity to assess in depth in this study.

Rose production and export to Europe have been a success because of willingness to invest in the production. The production is at a rather high technological level with needs for fresh seedlings, chemicals, irrigation and knowledge. Professional flower producers and traders from the outside were willing to use their professional knowledge to get the rose production to take off. After a couple of decades of production, Kenya has been able to involve small-scale farmers as well as large-scale producers in the production. The majority of the Kenyan flower producers today are small-scale farmers. However, in Tanzania and Ethiopia the situation is different. In Tanzania, there is a majority of expatriates owning and managing the rose farms while in Ethiopia both national and international investors are involved, but the technical know-how comes from abroad. Professional skills at all levels are of crucial importance to succeed. The motivation for investing in rose production in Africa might first and foremost be profit, but also to contribute towards socio-economic development in Africa. In particular the Fairtrade certified flower producers prove the social responsibility for their workers' welfare. Fairtrade certification is a demanding process requiring a lot of time, effort and paper work. For example Kiliflora in Tanzania has three full-time positions working on the certification process in relation to FLO's Fairtrade monitoring team and MPA Global Gap. However, there appears to be a willingness amongst at least some consumers to pay for the additional cost of fair trade products. Findings from Tanzania show that Fairtrade certified rose farms are able to provide decent and secure income to their workers; additional opportunities and benefits both at individual and community level; and environmental protection

Mester Grønn is a small and independent private sector company which is able and willing to take the risk of importing roses from Africa to Norway and at the same get an acceptable rate of return. *Mester Grønn's* rose business consists of 42% Fairtrade certified roses and 56%

certified roses imported from Africa - only 2% of the roses are produced in Norway. (Erling Ølstad, *Mester Grønn*, personal communication, April, 2008). Why do other Norwegian private sector agricultural companies to a larger extent not do the same - utilise the zero-tariff opportunity, their professional skill and contributing towards social corporate responsibility. Possible reasons might be that the import from Africa is demanding, takes quite a lot of idealism and innovation, you need to be able to think outside the box and get assistance from professional actors such as European flower trade networks. You might also need to be able to balance Norwegian producers' interests. Flower producers in Norway are worried about the competition from Africa and *Mester Grønn* is not particular popular among Norwegian producers and *Gartnerforbundet*.

What we might call Norwegian agricultural companies are often organised as cooperatives (Samvirke) owned by the producers/farmers. For example at **Nortura's** homepage you can read "*Konsernet er organisert som et samvirke eid av 31 000 aktive norske bønder. Felleskjøpet's* goal is to "*medvirke til at medlemmenes økonomi blir styrket på kort og lang sikt*". **Gartnerhallen** consists of "*Omkring 1.400 gartnere og potetdyrkere er sammen om å eie andelslaget Gartnerhallen, som sikrer forbrukerne etterspurte frukt- og grøntprodukter – med basis i et sterkt fagmiljø og gode leveringsavtaler*". The vision and mission for these agricultural cooperatives are amongst others to contribute towards securing favourable economic conditions for their owners who are Norwegian farmers.

The Norwegian *samvirke* organisations within agriculture are in many ways the strength and beauty of the Norwegian agricultural sector. Their goals are to secure the interests of their owners/members and not to waste valuable resources or take risks with the import of often competing agricultural products to Norway. According to the webpage *roser.no*, the production of roses has declined in Norway due to import of zero-tariff roses from Africa. This decline might be because there are few rose producers with a strong lobby in Norway. They have also been able to find other products to replace roses. How to find the right balance between Norwegian agricultural production and zero tariff imports from Africa is a challenge. There is a huge potential in Africa to export e.g., fodder, meat, cheese and vegetables that all compete with Norwegian production. What are the incentives for Norwegian *samvirke* organisations to facilitate such competing import? Probably very few, the situation is rather the opposite: there are disincentives embedded in the structure of these organisations. Still, there have been few attempts by Norwegian *samvirke* organisations to import agricultural products from Africa such as soya from Mozambique (*Felleskjøpet*) and meat from Uganda (*Nortura*). The recent price increase of agricultural products has made it less interesting for Mozambique to export soya to Norway as they may get good prices other places.

2007 was a special year regarding meat supply in Norway. The production of Norwegian meat was not able to meet the demand and about 7% of Norwegian consumption was imported (slf.dep.no, April 2008). The tariffs on meat were reduced for certain time periods to allow meat from other countries to enter into Norway. In a situation of shortage in Norway, the incentive for importing is much better. According to Dalen (in Thompson, 2007) the future situation in Norway will be an increasing demand for import of beef. However, biosafety regulations might hamper African meat from accessing markets in Norway.

Nortura (Gilde-Prior) has started an initiative of assisting Uganda in developing export-oriented meat production. This initiative includes organising beef farmers, establishing modern slaughterhouses, veterinary services, food safety control systems, transport and distribution (Thompson, 2007). The first slaughterhouse is expected to be up and running in

2009 and will contribute towards solving some of the main problems which include low hygiene standards and lack of food safety compliance (ibid). Gunnar Dalen, Board member of *Nortura*, states that Norwegian and Ugandan farmers have mutual interests in continuing to keep the tariffs high for countries like Brazil and Argentina in order for LDC like Uganda to benefit from zero-tariff import of meat to Norway, and Norwegian farmers to escape competition from the strong meat producers in middle income countries. Gunnar Dalen also adds that assisting Uganda in developing their beef production will strengthen *Nortura's* image (Thompson, 2007). The *Nortura* initiative is perceived positively by the Ugandan government amongst others for addressing the whole food chain from animal health and production to transport and international marketing (Otim in Thompson, 2007).

Norwegian *samvirke* organisations' goal is to promote and protect the Norwegian producers and they are very successful in fulfilling this goal. What incentives are needed for these actors to import agricultural products from Africa other than shortage in Norway? There are also several products that do not compete with Norwegian farmers' interests, however, such as tropical fruits and vegetables, rice, sugar, nuts, spices and wine, to mention a few. What incentives and policies are needed to import more of these commodities from Africa instead of from the EU, USA and middle-income and better off countries? What role should the Norwegian government play in encouraging import of agricultural products from low income countries in Africa? In Norway's new Action Plan *Aid for Trade* (MFA, 2007b), the introduction states how African low income countries are losing out on the world market. The Action Plan states that Norway will focus on three *aid for trade* areas: *Good governance, Regional trade, and Women*. Surprisingly, there is nothing on how Norway could contribute towards improving Africa's market access to Norway, e.g. how to increase the import from low-income countries in Africa to Norway.

In many developed countries there is strong support for buying food and other agricultural products locally. Support for local food purchase reflects concerns to protect national rural communities and includes a myriad of social, environmental, cultural and economic issues (Wangler, 2006). For Northern governments, how to find the right balance between national producers' interests who have voting power in the country and provision of market access to developing countries is indeed a challenge. This might be the reason for why the *Aid for Trade* Action Plan does not include policies or actions on how to increase the import of products from LDCs and other low-income countries to Norway.

Regarding climate change, the environmental concerns related to transport of products from low-income countries in Africa to Norway and other European countries are increasing. This is an important issue when it comes to import of roses and other products. IIED has estimated that cutting back on the import of fresh fruits and vegetables from Africa will reduce UK emissions of greenhouse gases with less than 0,1% while seriously impacting the livelihoods of one million Africans (Toulmin, 2007). It is again a question of finding the right balance. IIED introduces the concept of fair miles. How to provide market access to African farmers without negatively impacting the environment? The finding in this report is that roses produced in Tanzania and transported to Norway by air and marketing in Norway involves lower greenhouse gas emissions than roses produced in Norway and marketing in Norway. In other words, it is more environmentally friendly to produce roses in Tanzania and sell them in Norway than to produce and sell roses in Norway. It should be added that it is indeed difficult to do an accurate calculation of greenhouse gas emissions for the two alternatives. The results will vary according to assumptions and factors used as there is no one internationally accepted standard for how to undertake such a calculation.

CONCLUSION

The purpose of this study is to assess to what degree and how it is possible to increase import of agricultural products from low-income countries in Africa by utilising the zero-tariff advantage and by learning lessons from the flower import. Roses from Africa (Kenya, Tanzania, Ethiopia and Uganda) are one of the very few agricultural products from low income countries that have been able to really benefit from the zero-tariff system that Norway introduced for the least developed countries (LDC) in July 2002. *Mester Grønn* is an important reason why rose import from Africa to Norway has increased substantially during the last years; *Mester Grønn* is successfully imports 98% of its roses from Africa. The rose production creates income opportunities that contribute towards improving livelihoods of poor men and particularly women in Africa. Roses produced in Tanzania and transported to Norway by air, also have lower emissions than roses produced in Norway. In other words, it is possible both to support poor people in developing countries and reduce carbon emissions. Climate change and carbon emission are no excuse for not connecting Africa to the Norwegian market.

Norway scores poorly on trade rankings such as the Commitment to Development Index. Import from LDCs in Africa, except Liberia, accounted for only 0,15% of all import to Norway in 2006. The new *Aid for Trade* action plan (MFA, 2007b) does not include policies or actions on how to increase the import of products from LDCs and other low-income countries to Norway. How to find the right balance between Norwegian farmers' interests and provision of market access for LDCs and other low-income countries is indeed a challenge. LDCs + 14 have zero-tariff access to the Norwegian market even for high tariff products such as grain/fodder, meat, milk products (e.g. cheese) and vegetables. However, the LDCs have not been able to utilize this market access in the same way as for roses. LDCs + 14 could learn from the rose success and find partners in Norway which are willing to invest in the whole market chain from production to consumer and at the same time make a profit. Norway could, for example, play the same role for fodder or meat as the Netherlands has played for flowers in relation to production expertise, know-how, marketing and export/import. Several low-income African countries could export a considerable volume of fodder and meat. The *Felleskjøp* experience could be extended in new ways in other countries than Mozambique, as well as *Nortura*'s plans for meat import from Uganda to Norway. The Norwegian government could also provide incentives to Norwegian agro-businesses to team up with partners in LDCs + 14 in order to increase the import of agricultural products from LDCs + 14 to Norway. With the limited export capacity of the LDCs + 14, it is not likely that this will negatively affect Norwegian farmers in the future. But it is still a good idea to prepare for success (e.g. 10% of the market) ahead of time by making some changes in Norwegian agricultural policy in the form of compensation to Norwegian farmers. If not, the necessary support for such import might not be there. Switzerland has been able to make changes in the agricultural policy in a way that opens up for increased import of some products and at the same time ensure that Swiss farmers are compensated.

The *Nortura* initiative of assisting Uganda in developing export-oriented meat production is an interesting example of a holistic market chain approach from animal health and production to transport and international marketing. In a way, this approach is somewhat similar to the lessons learned from the rose success. However, for *Nortura*, the interests of Norwegian farmers play a much greater role in the arguments for entering into this kind of enterprise than for *Mester Grønn* in relation to Norwegian rose producers. *Nortura* suggests that Norwegian and Ugandan farmers have mutual interests in continuing to keep the tariffs high for countries

like Brazil and Argentina in order for low-income countries as Uganda to benefit from zero-tariff import of meat to Norway, and Norwegian farmers to escape competition from the strong meat producers in middle-income countries. To the degree that it is possible to find ways of having both farmers in Norway and in low-income countries benefit from collaboration and increased import to Norway, the prospects for success will be greater.

At present, food prices are rising on the world market causing increased poverty, food insecurity and food riots in many developing countries. Regarding trade with agricultural products, the best approach in such a situation for poor urban and rural consumers might be to utilise the potential that lies in improving the availability of food in developing country markets by connecting small-scale farmers first and foremost to national markets. Many small-scale men and women farmers are presently not sufficiently connected to markets and might be able to considerably improve the food availability situation in many developing countries if they were assisted in making the market connection. On the other hand, a situation of high world food prices, maybe even higher than in Norway, might be perfect for preparing the ground for increased import of agricultural products from low-income developing countries to Norway. The reason being that import, when prices are high, will be more acceptable to Norwegian farmers because the import will be limited and not be perceived as a threat to Norwegian production. If food prices again decrease in 2-5 years, the import might gradually find its way to Norway and not come as a sudden negative surprise to Norwegian farmers. However, zero tariffs for LDC+14 will not make much difference in a situation of high world food prices. Norwegian importers might as well buy from other producers than LDC+14 (e.g., meat from Brazil or New Zealand) because there is no longer a price incentive to import from LDC+14. If the Norwegian government wants to increase the import of agricultural products from low-income countries in Africa to Norway in a situation of high food prices, other measures than zero tariffs need to be put in place.

RECOMMENDATIONS

In order to try to increase the import of agricultural products from low income countries in Africa to Norway, Norad could do the following:

- Identify interests among Norwegian cooperatives (*Samvirke*), the private sector, supermarket chains, etc to import agricultural products from Africa. Try to identify actors such as *Mester Grønn* that could be focused on and possibly supported.

- Assess in detail what factors constrain these actors from importing agricultural products from Africa to Norway today e.g. in relation to what investments are needed and who is going to pay for these investments.

- Discuss with the interested actors in Norway how different constraints could be addressed. Ask *Mester Grønn* to contribute by sharing lessons learned from importing roses from Africa to Norway.

- Identify specific low-income countries in Africa regarding quantity and quality of possible agricultural products suitable for export (e.g. fodder, meat, vegetables, fruit, biofuel).

- Discuss with interested Norwegian actors how to be involved in the whole market chain to ensure success.

- Collaborate with Norwegian embassies in the countries in question regarding how to facilitate favourable conditions for export to Norway.

Identify possible private sector partners in low-income countries in Africa that could collaborate with Norwegian partners regarding import of agricultural products from Africa to Norway.

Invite possible exporters from low income countries in Africa to Norway to meet with possible Norwegian importers.

Since zero tariffs are of limited importance in a situation of high food prices, discuss with possible Norwegian importers what other incentives might be put in place to encourage increased import of agricultural products from Africa to Norway.

Learn from other OECD countries regarding their success with the import of agricultural products from low-income African countries.

Assess to what degree Norwegian actors could link up with European importers the way *Mester Grønn* has done. Assess to what degree Norwegian actors could play a champion role in relation to certain agricultural products the way the Netherlands has done for flowers.

Collaborate with other donors regarding market access initiatives (e.g. DFID, UNDP).

The above recommendations only address the import of agricultural products from Africa to Norway. Regarding trade, assisting in linking small-scale African farmers to national markets and promoting regional trade among African countries might be equally or more important than increasing the import of agricultural products from Africa to Norway. However, different kinds of market access are needed and should be promoted.

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APPENDIX

List of farms, producer organisations, government offices and institutions visited in Ethiopia and Tanzania

Ethiopia

Oromia Investment Commission

Alemu Semae – Commissionaire of Oromia Investment Commission

P.O.Box: 8787

Addis Ababa

Ethiopia

Tel: 00 251-011-553-15-26

Fax: 00 251-011-553-15-20

Ethiopian Horticulture Producers Exporters Association (EHPEA)

Contact person: Enas Ahmed (Information Officer)

Meeting with Chairman Tsegaye Abebe

Addis Ababa,

P.O.Box 22241 Code 1000,

Addis Ababa,

Tel. +251- 011-6636751

E-post: ehpea@ethionet.et

Web: <http://www.ehpea.org.et>

Farms visited:

Olij Roses

Rose Ethiopia

Ethio dream

Menagesha Flowers

Meskel Flowers

Agriflora

Air flower

Sher flower

From Hawassa university

Andargachew Gedebo

E-mail: andargachewg@yahoo.com

Address: University of Hawassa

P.O. Box 85

Awassa

Ethiopia

Tanzania

Tanzania Horticulture Association (TAHA)

Meeting with: Onesmo Kenneth and e-mailing with Jacqueline Mkindi, Executive Director

TAHA

Address:

Kanisa Road, House No. 49
PO Box 3003 Arusha, Tanzania
Tel: 027-2544568
E-mail: taha@habari.co.tz
www.tanzaniahorticulture.com

Farms in Tanzania

Kiliflora Ltd.

General Manager: Nick Stubbs

Kiliflora Ltd.,

P.O. Box 988,

Arusha, Tanzania.

kiliflora@kiliflora.com

<http://www.kiliflora.com>

Multiflower LDT

General manager: Tjerk Scheltema

Hortanzia LDT

General Manager: Joseph Giovianazzo