



Graduate School of Development Studies

Do Free Trade Agreements affect Household's Welfare?

Case of peace basket exports through AGOA in Rwanda

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Contents

<i>Acknowledgement</i>	<i>iii</i>
<i>List of Tables</i>	<i>vi</i>
<i>List of Figures</i>	<i>vi</i>
<i>List of Acronyms</i>	<i>vii</i>
<i>Abstract</i>	<i>viii</i>
<i>Relevance to Development Studies</i>	<i>ix</i>
<i>Keywords</i>	<i>ix</i>
Chapter 1: Introduction	1
1.1 Introduction	1
1.2 Background	1
1.3 Research problem	3
1.4 Justification and Relevance	4
1.5 Research Objectives	4
1.6 Research Limitations	4
1.7 Organization of the paper	5
Chapter 2: Rwanda	6
2.1 Introduction	6
2.2 Economy	6
2.3 Rwanda's Export Sector	6
2.4 Labour market	7
2.5 Peace Baskets	9
2.6 Handicraft Industry Value Chain Analysis	10
2.7 Market opportunities for Rwanda's craft products	12
Chapter 3: Trade theory and Free trade agreements	14
3.1 Introduction	14
3.2 Trade theory	14
3.3 Free Trade agreements / Free market access	16
3.3.1 Africa Growth and Opportunity Act	20
3.3.2 AGOA in Rwanda	21
3.4 Handicraft sector and employment in Rwanda	24
Chapter 4: Methodology	26
4.1 Introduction	26
4.2 Data collection Method	26
4.3 Sampling technique	26
4.3.1 Weavers	26
4.3.2 Non Weavers	26

4.4	Data Analysis Technique	27
4.5	Questionnaire and Variables	27
4.6	Model estimation	28
Chapter 5: Analysis and Interpretation of Data		31
5.1	Introduction	31
5.2	Macro Level	31
	5.2.1 Export Volume to different markets –Macro level effect	31
5.3	Micro Level	34
	Conclusion	35
	5.3.1 Comparison between weavers and non-weavers	34
	5.3.2 Comparison of the US and Japan market's Weavers	36
	5.3.3 Multiple regression analysis	37
5.4	Peace basket weaving as a source of employment and Income	40
5.5	Macro level - Micro level impact	40
Chapter 6: Conclusion		42
	References	44
	Appendices	47

List of Tables

1: Exports 2009 – 2010 (Value in USD Millions, Volumes in Tons)	7
2: 2002 -2010 Rwanda Handicraft Export Volumes in USD	13
3: Variable and their codes	29
4: Description of Respondent’s social demographic characteristics	34
5: Bivariate analysis for weavers, non-weavers and for US and Japan market weavers	33
6: Evaluation of weavers and non-weavers	37
7: Evaluation of US and Japan weavers	39

List of Figures

1: Flow Chart illustrating effects of AGOA on Macro and Micro levels	3
2: Rwanda’s exports to the US - 1992-2011	22
3: Share of exports from Rwanda to United States by Preferences system in 2008	23
4: Handicraft export volumes 2002-2010 USD '00 in Rwanda	33

List of Acronyms

\$	US Dollar
AGOA	African Growth and Opportunity Act
ASEAN	Association of Southeast Asian Nations
BNR	Banque Nationale du Rwanda (National Bank of Rwanda)
CFSVA	Comprehensive Food Security and Vulnerability Analysis
CGE	Computable General Equilibrium Model
COMESA	Common Market for Eastern and Southern Africa
DFQF	Duty Free quota Free
DRC	Democratic Republic of Congo
EAC	East African Communities
EBA	Everything But Arms
EICV2	Population and Household Living Conditions Study
EU	European Union
FGDs	Focus Group Discuss
Rwf	Rwanda Francs
GATT	General Agreement on Tariffs and Trade
GDP	Gross Domestic Product
GNI	Gin coefficient
GSPLDC	Generalized System of Preference for Least Developed Countries
GTZ	Germany Society for technical cooperation
ILO	International Labour Organization
IMF	International Monetary Fund
LDC	Low Developed Countries
MDGs	Millennium Development Goals
NAFTA	Northern America Free Trade Agreement
NGOs	Non-governmental Organization
OECDs	Organization for Economic Cooperation and Development
PPPMER	Rurales (Rural Small and Microenterprise Promotion Project)
RDB	Rwanda Development Bank
SSA	Sub Saharan Africa
UK	United Kingdom
UN	United Nations
UNCTD	United Nations Conference on Trade and Development
USA	United States of America
USAID	United States Agency for International Development
USTR	United States Trade Representative
UTEXRWA	Usine des Textiles du Rwanda (Rwanda Textile Industry)

Abstract

The paper endeavoured to ascertain the effect of free trade agreement on household welfare by analysing peace basket exports through AGOA in Rwanda. The study analysed the effect on both macro and micro levels using data collected through an administered questionnaire. On the macro level, the study evaluated export volumes of Rwandan handicraft to different markets in comparison to the US market for over nine years (2002-2010) basing on data from Rwanda customs. AGOA helped weavers and exporters of peace baskets to further expand and access the US market even though there were already plans under way by the government to develop handicraft sector in the country. On the micro level using bivariate and multiple regression analyses; comparisons were made between weavers and non-weavers and between US and Japan market weavers to determine the effect of the Act on the household weaver's welfare. The sample comprised of 150 respondents; 50 non weavers (control group) and 100 weavers (treated group) in three districts of Kigali province; Nyarugenege, Kicukiro and Gasabo. Results show that non-weavers made to some level a valid control group for weavers (treated group) basing on the sample's demographic characteristics.

Furthermore, results also indicate a significant difference between weavers and non-weavers and between US and Japan market weavers basing on their socio-economic conditions like monthly income earned, hours worked per day, monthly savings, future and current financial situation and future and current provision of food and other basic necessities. This is attributed to a certain extent the prospect of accessing the US market through AGOA that has enabled weavers and exporters to not only earn an income and provision of employment that in return has had an effect on the weaver's welfare. At the same time they have also benefited from serving a demanding and challenging market that has enabled them to some degree modernize and perfecting their products which has led to creation of new designs, new products and expansion of their production. The study also indicates that it's not viable to generalize the research results on all weavers due to difference in poverty level in the country particularly between urban and rural areas indicating a need for further research. But all the same, free market access for non-traditional exports with an increasing return to scale to some extent has had a significant effect on household's welfare and the country at large in a poor resource country with limited and declining land productivity.

Relevance to Development Studies

The paper adds to knowledge in development studies about the significance of market access to developing countries exports particularly off farm exports in a densely populated country with limited, decreasing efficiency and farm land size per family. The study results could somewhat highlights the importance of market access for non-traditional export as source of sustainable employment and income in order to enhance wellbeing of the poor, reduce income inequality and poverty levels in developing countries. This is in comparison to other measures put in place for development especially advancing the service sector given a high prevailing rate of illiteracy or agriculture sector whose products are greatly protected on the international market especially in developed countries yet it employs the biggest population mainly the poor in developing countries. Therefore, the study may be of great importance to a country like Rwanda with a vision 2020 target of reducing its population to 50% in agriculture sector yet has a high illiteracy rate.

Keywords

Free trade agreements, free market access, AGOA, Household's welfare, Handicraft, Peace baskets exports, Rwanda

Chapter 1: Introduction

1.1 Introduction

The idea of trade improving welfare and development dates back as far as Adam Smith in the 18th century, emphasizing the importance of trade as a way of expanding the market and an outlet for surplus production leading to improved division of labour and productivity levels (Thirlwall, 2000). Productive powers and maximum annual production are increased due to opening up to a wider market for surplus production (ibid). The expansion of the market in comparison to a small domestic market leads to increase in domestic output which rises producers' earning leading to improved welfare of the population in return.

Special and differential treatment is intended to enable developing countries to participate fairly in the context of opening up of multilateral trading systems. It assumes accepting lesser responsibilities or receiving exemptions from responsibilities, or enjoying special treatment in accessing the market in comparison to what is received by other developing countries from developed countries. It is expected to promote and increase participation of developing countries in international trade and benefit more from their integration into the global economy, to enable them to use trade as an engine of economic growth besides reducing poverty and pushing forward social development (Lankes, 2002). Has Rwanda, peace basket weavers in particular benefited from the Act's free market access? The paper aims at examining the effect of African Growth and Opportunity Act as free trade agreement on trade expansion of peace baskets and on the household's welfare of the weavers in Rwanda.

According to World Bank, more rapid growth in developing countries linked with a global reduction in protection could reduce as much as 13 % of the number of poor people by 2015, and make a valuable contribution to meeting the Millennium Development Goals. In the 2000 Millennium Declaration, UN members agreed that duty-free, quota free (DFQF) market access should be provided by developed countries for LDCs to boost their engagement in global markets as a tool of poverty reduction (Lankes, 2002). With preferential market access through trade agreements like AGOA, developing countries like Rwanda can increase export volumes through economies of scale and also expand into non-traditional sectors like handicraft that can generate employment and in turn decrease poverty in the country.

1.2 Background

Developing countries have been granted preferential market access in developed countries through specific targeted schemes like the Lomé and Cotonou Conventions, and recently by Everything But Arms (EBA) by European Union and the African Growth and Opportunity Act (AGOA) in the United States. Under these preferential schemes, Developing Countries

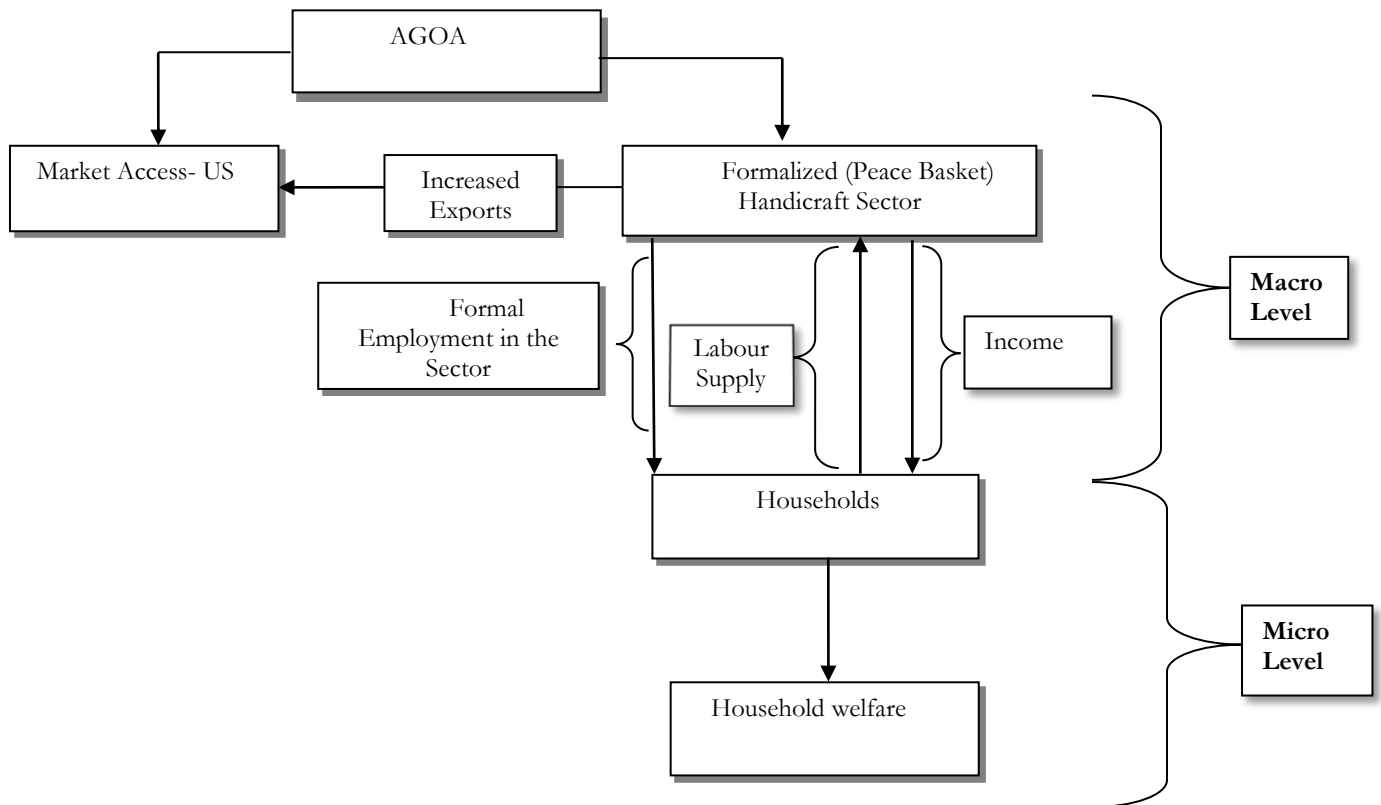
have received some measure of duty-free, quota-free treatment for their exports (Puri, 2005).

Developing countries like Rwanda could benefit a lot by taking advantage of the free market access through AGOA by diversifying to other exports in order to supplement their limited agricultural sector. In Rwanda, the Act has enabled handicraft exporters to access the US market as handicrafts have become increasingly popular in the global market and many developing countries are exporting handicrafts to the developed world, creating a new source of revenue and employment. Handicrafts have proved to be a sustainable source of income and employment particularly in poor rural areas in LDC. In India, Taimni, (1981) points out that a five year plan of providing employment to 400,000 people was achieved while Belk and Grove (1999), argue that the global interest in handcraft of the Aboriginal in Australia has created employment in their communities. Handicraft expansion into international markets offers a possible source of employment for artisans in Rwanda; a country with limited land for agriculture.

The latest development of the handicraft in Rwanda, “Peace baskets” in particular and AGOA’s role are the main focus of this research. The study looked at the effect of the Act on both macro and micro level in the country and the role of AGOA in basket export expansion? What is AGOA’s role in creating employment and generating income for household? What is AGOA’s effect on the economic welfare of households?

The paper assesses the effect of a free market access on household’s welfare by looking at income earned through peace basket weaving and further analyses the benefits of income earned through weaving in comparison to non-weavers basing on socio-economic conditions. The study would also strengthen importance of handicraft sector as an off-farm employment since the Rwandan government’s vision 2020 is geared towards reducing agriculture farming from 95% to 50% (Ministry of Trade and Industry, 2009)

Figure 1: Flow Chart illustrating effects of AGOA on Macro and Micro levels



Source: Own illustration

The chart illustration helps to show the effect of free market access through AGOA on both Macro and Micro level; On the Macro level, Rwandan peace baskets exports (Handicrafts) gained access to the US market through AGOA due to the removal of tariff and non-tariff barriers. This to some extent led to increase in domestic production of peace baskets, peace baskets export volumes, and formalised handicraft sector in the country. On the Micro level; increase in exports in some way increased employment in the sector especially for the uneducated vulnerable women majority of whom are family heads enabling them to earn an income resulting into enhanced household weaver's welfare due to labour supplied. Therefore, access of the US market through AGOA in Rwanda could have increased peace basket exports leading trade creation and generation of employment and income in the sector resulting in better welfare for household weavers.

1.3 Research problem

Developing countries are finding it hard to access market for their exports especially for agriculture products which has continuously slow down their economic growth. Yet their integration into global economy and international trade is expected to reduce poverty and improve economic and social development. This is mainly through preferential market access to developed

countries markets that has enabled developing countries to expand and diversify exports. This paper focuses on the effect of a free market access for off-farm production (weaving) on household's welfare through provision of employment and income earned from weaving. Most research including Duygan and bump (2007) , Pradhan and Amarendra (2006), and Nicita (2004) looks at the effect of trade openness on households' welfare through price transmission mechanisms (how tariff reduction is translated into households' disposable income), through effects of households' earnings and through changes in the public sector (tariff revenue changes). But not much focus on the effect of market access for off-farm exports on producer's welfare and trade expansion in a densely populated country with limited and low productive land like Rwanda that mainly depends on the agricultural sector. What are the effects of a preferential market access of peace baskets through AGOA to the US to household weaver's welfare in Rwanda? The research paper attempts to highlight if AGOA which granted a free market access for peace baskets made weaving a viable economic activity leading to improved standards of living for the household weavers in Rwanda through generation of employment and income and further creating trade and expanding peace basket exports.

1.4 Justification and Relevance

This paper highlights the effect of a free market access of off-farm production (handicraft) to household welfare in a densely populated country with declining average farm size and land productivity. The IMF study done by Lankes (2002) point out that most LDCs encounter high tariff and non-tariff barriers on agricultural products yet three quarters of the world's poor depend on agriculture for a living. The paper emphasizes the importance of duty free quota free market access of non-traditional exports in generation of jobs and income for improving poor household's welfare and the country's economy.

1.5 Research Objectives

This paper will examine the role of AGOA both on macro and micro level in the development of handcraft sector particularly peace baskets and its effects on the (weavers) households' welfare. In order to do so, the research will try to answer the following question:

- What was AGOA's role in development of peace basket weaving industry?
- Did the Act generate employment and income for weavers?
- Is there any difference in household's welfare weaving for different markets?

1.6 Research Limitations

A major concern for this research was how to get accurate information from women weavers especially about past incomes and expenditures before

weaving baskets. Some women could have overestimated or underestimated their past incomes. This was worked out through interviews, and writing down a narrative qualitative data on their past incomes and expenditure backed by the control group of non-weavers.

1.7 Organization of the paper

The research paper is made up of five chapters, beginning with introduction, background of the study, objectives and justification of the study in the first chapter, the rest of paper is into four chapters; Chapter two evaluates some of the studies done on the topic under study, chapter three looks into the methodology used in the study, analysis, interpreting and findings of the research are found in chapter four and lastly chapter five include the key findings of the study, conclusion and policy proposal.

Chapter 2: Rwanda

2.1 Introduction

This chapter looks at the country's economy, labour market, and Rwanda export sector, development of the handicraft sector in the country highlighting the relevance, products, challenges, export volumes and market opportunities.

2.2 Economy

Rwanda has made tremendous improvement since its 1994 genocide and war ruins even though it remains low developed. The country's economy is growing at 7.5% rate in 2011; 2% higher than the East African Community and more than sub-Saharan Africa (World Bank, 2011). The economy is characterized by internal and external macroeconomic disequilibria, low saving and low investment rates, high unemployment and underemployment (Vision 2020, 2000). Rwanda, a small rural country has an estimated population in 2011 of 10.7 million and high illiteracy rate of 48% both in urban and rural population (Vision 2020, 2000). In addition, World Bank (2011) estimates that 79.5 % of Rwandan population lives on agriculture that's still mainly subsistence in nature, scarce and poor quality of land with large number of families owning less than 1 hectare that's too small to earn a living (ibid). In addition, Rwanda's exports are mainly tea and coffee whose prices fluctuate on the international market making the Rwandan population unable to live only on agriculture alone (ibid). There is a need to formulate new ways to expand the economic base into other sectors to increase exports and employment other than primary sectors. That's why the government's vision 2020 is geared towards reducing agriculture farming from 95% to 50% and cut poverty level from 60% to 30 % (Vision 2020, 2000).

2.3 Rwanda's Export Sector

Rwanda's goods and services exports are small representing 10% of its GNI¹ in 2003, below the average sub Saharan Africa. The export sector was very affected by the 1990s war leading to a decline in export volumes by 60%; Sum of exports per capita per year equal to US \$18 in comparison to US\$45 in sub-Saharan Africa. However, the country has come to be reliant in trade terms as indicated by the real trade and GDP growth ratio (Vinck, 2006). Trade is fundamental to Rwanda's economic advancement and poverty reduction given the country's small domestic market size. Additionally, overall poverty and an economy based on subsistence agriculture, physical location limitations have a significant effect on the country participation in international trade (Vinck,

¹ Gross National Income

2006). Being a landlocked, makes Rwanda's communication sector costly and poor though participation in free trade areas like Common Market for Eastern and Southern Africa (COMESA) and market access through special trade agreement with United States and the European Union would help export market expansion (ibid). The largest export crop is tea; followed by other main exports like cassiterite and coltan. According to the World Bank, high price instability on the world market for these products significantly affects the economic performance of the country (ibid). That's why export diversification especially into non-agricultural sector like handicraft could have a significant impact on the country's economy not only through complementing the agricultural sector exports but by increasing exports and employment.

Table 1: Exports 2009 – 2010 (Value in USD Millions, Volumes in Tons)

	Jan-Dec 2009		Jan-Dec 2010		% Change	
	Volume	Value	Volume	Value	Volume	Value
Exports	103,135	234.9	112,700	297.3	9.3	26.5
Coffee	14 992	37.3	18 236	56.1	21.6	50.4
Tea	18 689	48.2	21 528	55.7	15.2	15.5
Tin	4 269	28.6	3 874	42.2	-9.3	47.7
Coltan	950	20.2	749	18.5	-21.2	-8.7
Wolfram	874	5.8	843	7.1	-3.6	23.3
Hides & Skins	1 792	2	3 731	3.7	108.2	90.8
Pyrethrum	3	0.6	6	1.4	99.2	118.6
Re – exports	4 080	20.6	7 398	35.9	81.3	74.5
Other export products	57 485	27.7	56 394	33.8	-1.9	21.9

Source: National Bank of Rwanda, Statistics Department

2.4 Labour market

Free market access for non-traditional sectors like handicraft sector weaving in particular can be a strong support for a massive unskilled labour in a developing country with a high illiteracy rate. The opportunity could have an effect on poverty levels through job creation and could offer a better income in comparison to low agricultural earnings. What's more, such an opportunity

can safeguard worker's well-being especially vulnerable women involved in hard labour in informal sectors like construction sites, street vending etc. with low earnings and without social benefits.

Labour market in Rwanda is made up of a high labour force participation rates and very minimal rates of unemployment which makes it a challenge for the government to come up with policies to raise the number of high earning and quality jobs to improve the earnings for low value jobs (World Bank, 2009). What's more, agriculture still is the biggest employing sector; three out of every four jobs even though there has been a considerable shift to non-agricultural work between 2000 and 2006 (World Bank, 2009). According to the World Bank (2009), there was a 13% decrease in primary sector total employment from 2000 to 2006 to 76.7%, whereas employment in the secondary sector tripled as a percentage of total employment though still somewhat small at 5.1% of total jobs. Also, there has been an increase of jobs in the tertiary sector; making up one-fifth of jobs in 2006 compared to one-tenth in 2000(ibid). This substantial improvement in the non-agricultural employment is a very important progress in the Rwandan labour market if it could be maintained. This will lead major changes in transforming the country's economy to better earning sectors to complement the primary sector that's not so valuable both to the population's welfare and the country at large.

Poverty status and employment status are interconnected closely; waged farm labourers are the poorest with one third of them falling in the lowest quintile. These are followed by family farmers and the well-off being waged off-farm labourers half some of them falling in the highest quintile. There is a clear difference between non-farm labourers and farmers as well as a gender difference. Furthermore, 40% of the household heads are in the poorest quintile with paid farm work as their key job whereas 50% waged off-farm labourers fall in the richest quintile. Additionally, amongst the poor; 45% are semi-skilled and 49% are unskilled (Vinck, 2006). This is a clear indication of how the agricultural sector in Rwanda despite being the biggest employer does not provide much benefit to households relative to off-farm activities. This proves the importance of a free market access for non-traditional production or a shift from primary to better paying sectors like secondary and tertiary sectors to the welfare of the population and the country at large.

Poverty remains rampant in Rwanda even with a period of fast economic progress; its ranked 152nd out of 169 countries below the SSA average level². Poverty levels fell from 60.4% in 2000/01 to 56.9% in 2005/06 and an increase in inequality with a Gini coefficient of 0.51 from 0.47 (EICV2, 2007). Poverty levels are lower largely for waged or household business off-farm workers yet there is poverty increase among them throughout the country with the exception of Kigali (ibid).

² <http://hdrstats.undp.org/en/countries/profiles/RWA.html>

2.5 Peace Baskets

In Rwanda, different products are produced in different regions and districts depending on raw materials and indigenous skills. Some of the major handicraft products include the following; baskets, wall hanging (Imigongo³), wood carving and masks, bracelets and jewellery products, ceramics and pottery etc. (Ministry of Trade and Industry, 2009).

Peace Basket locally known as “Agaseke” is an art-craft article woven using sisal, grass, raffia, banana peel, papyrus, osiers, willow, bamboo, palm and rattans. The finely crafted, delicate baskets are made from natural fibers and women using a technique that has been practiced for almost a thousand years. Several types of Ageseke are made according to proposed usages, decorations or ornaments and come in different sizes which include cradles, cases, shopping bags, table mats etc. (Plunnkett, 2008).

Basket weaving has been Rwanda’s greatest craft for centuries, women are taught the art of basket weaving from a young age at the hands of their mothers and grandmothers carrying on a practice that had been handed down from generation to generation which today involves numerous women in both rural and urban areas. The Rwandan Baskets symbolizes a coming together of Rwandan women to provide for the needs of their families while instilling a love and appreciation in their children for their country and their culture (PPPMER, 2010). In the times past, the Rwandan women used the smallest of these baskets to swap secret greetings or any other information with one another, but nowadays symbolize a fresh start for a country that is moving beyond it’s painful past (PPPMER, 2010). The Peace baskets derive their name from the environment in which they are woven; Women whose husbands were killed during the genocide sit with women whose husband killed and weave together for a common cause of peace, reconciliation and a need to earn a living. The stories behind them and the distinctive characteristics of Rwanda handicraft make them a strong selling point to foreign market (Plunnkett, 2008). Peace baskets exports have gained benefits more than other products in Rwanda from the free market access through AGOA mostly exported by Gahaya links.

Gahaya links company owned by Janet Nkubana and Joy Ndunguste was started when the sisters gave the women a small shop to sell their baskets instead of hawking the baskets outside their hotel premises and later offered to meet the women in their villages and teach them how to use an old Rwanda traditional skill to better their lifestyles after realizing that the baskets had market with the tourists. The sisters organized about twenty women and taught them how to improve their weaving abilities with new design skills and they now have over 4,000 weavers. The sisters formed Gahaya links, the first Rwandan handcraft Export Company to benefit from the Africa Growth and

³ 18th Century traditional Rwandan art in spiral and geometric designs of cow dung on wooden boards decorated in colours from organ material.

Opportunity Act which enabled them to penetrate the US market. There are other women weaving groups but not under Gahaya links as the chain leader with the biggest market in the US. Other women groups are supported mainly by NGOs and government institutions that also export to the US market. Most women weavers who joined Gahaya links were trained with the help from Women for Women, an NGO that supports women survivors of war to improve their opportunities for a better future. The women include female headed households either widows or wives whose husbands are in jail and were struggling to feed their families⁴.

Furthermore, Agaseke Project under Kigali city trained women weavers to create employment for vulnerable, unemployed and landless women in the city. The 16 cooperatives are under one union, with over 3000 women trained even though the number reduced considerably and returned to less sustainable and insecure ways of gaining an income for their families. This was mainly due per diem termination at the end of the training and less orders from exporters even though more women are being trained under the project. Before most women were involved in hard labour jobs like working at construction sites, as hired farm labourers, street vending that is illegal on the streets of Kigali city, some were jobless. On average most women earned \$ 1.8 per day and most jobs like street vending, working at construction sites and hired farm labour are not on regular basis and do not provide a regular and sufficient income. With weaving, most women are able to earn a more reliable and regular income, more secure and sustainable work unlike their economic activities before which has had to some extent an effect on their families' welfare.

Therefore, in order to measure the effect of weaving on household welfare, non-weavers were used as the control group basing on social demographic characteristics for both weavers and non-weavers. Some non-weavers possess weaving skills either learned through training by different projects by some NGOs or under Kigali city or as a tradition from their elders at home. A number of non-weavers with weaving skills confessed to dropping out or not weaving due to lack of regular orders for their products from their buyers, as a result returning to their low paying work which to some extent provides a regular income.

2.6 Handicraft Industry Value Chain Analysis

For the handicraft sector to significantly benefit more from AGOA there is a need to improve its market settings through its supply chain in order to yield more from the free market access. Plunkett (2008), states that Rwanda suffers the “competitive consequences of high transport costs for exporters,” including poor performance on the timeliness of delivery. Unfortunately, these structural characteristics hinder Rwandan exporters from benefiting more

⁴ <http://www.gahayalinks.com/about-us/background>

extensively from the tariff benefits available under AGOA or EBA. Even though the handicraft exports are not time-sensitive due to perishability, the Rwandan handicraft exporters have to ensure on-time delivery to foreign buyers. The contracted shipments for handicrafts must reach the ports of Mombasa and Dar es Salaam in time to meet the ships on which they are scheduled for departure. However, the products exported go by truck from Kigali through Uganda to the Kenyan port of Mombasa, where they are shipped by ocean freight (ibid).

Besides cost of transport, when Gahaya Links exports to the US, the exported products are picked on arrival up by marketing intermediaries, who sell them to Macy's. The "middleman" in the US obviously reduces the market power of the exporter and the profitability of the trade (ibid). The goods are either sold by contract upon departure from Rwanda or considered sold upon safe arrival in the US, in which case losses incurred during transit may be deducted. There are several trading firms operating in the sector in Rwanda but Gahaya Links is the main exporter; therefore, there is a need to promote and expand exports by other existing firms and establishment of new entrants into the group of exporters to lessen the monopoly by Gahaya links and a few others to increase competition to earn weavers fairer prices (ibid). More handicraft exporters particularly peace basket exporters will not only mean a better pay for weavers but more people employed in the sector and market expansion for handicraft products.

Furthermore, it has been difficult to increase export of craft products due to failure to adapt to consumer needs in international markets in terms of quality, designs, dimension, standards, sizes and above all ability to muscle a critical supply capacity in the sector (ibid). Poor designs skills, specialization, inconsistent product standardization, poor finishing are among other detract from product quality upgrade. Low product development and limited knowledge on market access and low market development efforts are still inhibiting export growth in the sector. Most producers are ignorant of the seasonality and trendiness of craft products, as well as the socio-environmental requirements of the markets (ibid). However, continuous trainings are ongoing in order to upgrade products and come up with new ones plus to overcoming the problem of under productions.

Craft products targets both domestic and international markets, domestic buyers are either tourists or local buyers who serve as market intermediaries and sell on the local markets in urban areas or export directly. Rwanda's crafts trade are largely informal marked with inconsistent and adhoc market access, entry and market entrance approaches, and market supply networks that are insufficient (ibid). The Strategy for handicraft exports, as explained by the Ministry of trade and Industry and Export Promotion Agency, is to penetrate the medium and lower-value markets in the US, which are considered to be enormous. Therefore, Rwandan handicraft exporters need assistance with market information, trade leads, and technical help (ibid). This is the main reason the Craft industry Secretariat in the Ministry of Trade and Industry was set up to help exporters, producers and the handicraft sector to upgrade and develop products and expand the market.

2.7 Market opportunities for Rwanda's craft products

As stated earlier, the USA under AGOA, the European Union under EBA offer preferential treatment for Rwanda's craft products. There are opportunities in other markets established through bilateral trade agreements. Currently most of the craft products in Rwanda are sold domestically to local buyers and tourists with some exported to Germany, UK, Japan and Italy. Other existing markets for Rwanda's crafts are Rwandans in the Diaspora and Kenyan traders who buy Rwandan craft pieces and re-export them to Europe and the USA. (Ministry of Trade and Industry, 2009) Table below shows amount of Rwanda handicraft exports to different countries over a nine year period.

Table 2: 2002 -2010 Rwanda Handicraft Export Volumes in USD

Years	2002	2003	2004	2005	2006	2007	2008	2009	2010
Destination	Value	Value	Value	Value	Value	Value	Value	Value	Value
Belgium	6,482	2,479	1,881	9,390	3,080	390	4,365	831	6,210
Canada	1,543	-	16,621	26,841	6,987	18,050	1,721	142	383
France	13,121	2,991	724	18,799	320	10,596	12,791	-	10,458
Germany	49,083	13,746	18,793	29,703	19,435	3,859	19,367	856	521
G. Britain	667	2,793	-	50,377	1,136	-	10,661	5,468	-
Italy	29,205	6,069	1,729	36,346	21,867	15,874	117,041	4,353	4,320
Japan	-	-	-	4,775	-	-	7,652	4,808	7,165
US	-	56,128	7,521	87,811	131,703	274,531	520,750	496,237	648,900
Total / Year	100,101	84,206	47,269	264,042	184,528	323,300	694,348	512,695	677,957

Source: Rwanda Customs

Chapter 3: Trade theory and Free trade agreements

3.1 Introduction

This chapter discusses the trade theory, free trade agreements and their effect on household welfare. Chapter further discusses empirical research done on free trade agreements effect on household's welfare and country at large , AGOA in general and Rwanda in particular and handicraft sector in Rwanda.

3.2 Trade theory

Trade amongst countries takes place due to different reason and according to Suranovic (2008) different trade models explain different reasons why trade take place between countries. Suranovic (2008) highlights the reasons why two countries move from autarky to free trade due to difference in technology using the Ricardian model (ibid). The difference in prices of goods due to difference in technology between countries encourages trade and causes trade in the model, gainful trade can take place between countries if they differ in production competence for goods and services including labour or capital methods of turning resources into output (ibid). It's a basis for evaluating the effects of trade on incomes, production levels of goods, employment levels and consumption levels and welfare effects both nationally and individually, a nation benefits from trade only if the relative price of a product is different from when it's not involved in free trade (ibid). Exports of peace baskets to US market through AGOA in Rwanda have any effect on weaver's income, consumption, employment and their overall welfare? Or lead to increase in production level of peace baskets in Rwanda? Suranovic (2008) concludes that the model enlightens some things but not everything that could occur when two countries trade. Study will observe if AGOA in fact led to increase in peace baskets production and exports due to free access of the US market, generated employment and had any effect on weaver's income earnings and in turn their consumption and welfare.

However, Thirlwall (2000), points out that comparative trade theory does not take into account monetary and balance of trade payments concerns since balance of trade problems cannot be corrected on their own through movements of relative prices (ibid). Further, the theory also does not assure equal gains from trade that is mainly through exchange rate between two goods, terms of trade, and if full employment is retained in the course of reallocating resources when countries are specializing. One country could turn out to be totally worse off if trade gains from real resources are set off by a reduction in terms of trade (ibid).

Contrasting the Ricardian model that concludes equal trade benefits, the Heckscher – Ohlin model while integrating differences in endowment, theory recognizes existence of winners and looser from trade. Rwanda like most developing countries has abundant unskilled labour can thus benefit more from producing and exporting labour intensive products like handicrafts because they are cheaper to produce compared to capital goods. Furthermore, the Stolper - Samuelson theorem is useful in analysing factor income effect upon countries

joining free trade or when tariffs or other government policies are enforced within the H-O model's perspective (Suranovic, 2008). The study will examine if removal of tariffs and non-tariff barriers and other government policies made have benefited household weavers in Rwanda like government support of off farm exports and joining AGOA. According to Sen (2010), making changes in the basis for trade could transform trade effects, instead of basing only on comparative supply costs alone; justification of free trade basing on Pareto- optimum could ensure balance for two trading countries through increased production, trade exchange and consumption. Besides, granting a free trade agreement for low developed country like Rwanda for period of time could lead to the country establishing itself in developed countries markets which could guarantee most favourable trade outcomes.

According to Viner's theory of preferential trade liberalization, removal of tariffs, quotas and non-tariffs barriers is believed to allocate resources (Bhagwati and Panagarya, 1996) and Kersten (2008) emphasizes how free trade agreements can both create and divert trade due to reduction of tariff rates within the customs union and trade creation; improvement of resource allocation leads to welfare gain whereas trade diversion worsens allocation of resources and leads to welfare loss (ibid). The study will look at the theory estimates by observing if the free market access through AGOA indeed led to trade creation by expanding peace basket exports due to removal of trade barriers in US. Furthermore, the study will also examine if the removal of tariffs and non-tariff barriers led to resource allocation, benefited and improved household's welfare but not into distraction of trade and welfare.

Plummer (2010), states that the theory signifies allocation of resources due to reduction in tariffs and regional trade agreements not only improve welfare due to trade liberalization but could also have a negative impact (ibid). Free trade's most beneficial outcomes for the general population will be realized when the supply of goods is permitted to flow freely to meet demand without government intervention through such as tariffs, quotas and other non-tariff barriers (Sheehy,2006). The removal of tariffs and non-tariffs for Rwandan exports in the US could enable expansion of peace exports due to increased demand which could lead to creation of trade, employment and income which could result in improved welfare. Joseph Stiglitz former chief economist of the World Bank quoted by Sheehy (2006) urging for free trade writes that: "*opening up to international trade has helped many countries grow far more quickly than they would otherwise have done.... Because of globalization many people in the world now live longer than before and their standard of living is far better.*" (Sheehy, 2006: 12)

According to the World Bank, consumption reflects household's ability to meet basic needs, goods and services a household can command based on its current income, savings when income is low⁵. In this research, basket weaver's welfare is to be measured basing on their income /consumption but also other

⁵ <http://web.worldbank.org/WBSITE/EXTERNAL/TOPICS/EXTPOVERTY/EXTPA>

socio-economic variables including their ability to meet basic needs, purchase goods and services, save, time allocation between different activities (family labour supply) and if there is any welfare improvement unlike before.

With a free market access for Rwanda's peace baskets to the US market through AGOA, household weavers might benefit from enhanced welfare through labour supplied and better earnings in comparison to their past economic activities and earnings. A free market access can turn weaving into better remunerative work unlike for example agricultural activities with no wider market on the international market. A wider market that's duty free quota free could mean trade creation and exports expansion for peace baskets which in might turn lead to increased employment in the sector and better pay for the household weavers and in return improved welfare.

3.3 Free Trade agreements / Free market access

Free trade agreements recommended under trade liberalization are assumed to boost growth and reduce poverty in low developing countries through expansion of exports. Nafukho (2003), points out that due to the failure and dependence on foreign aid and other development strategies, economic development in African countries through trade is being encouraged. This is mainly through trade liberalization supported by neo-liberal trade theory with an idea of creating a level of playing field for economies to compete on all levels of development (Nafukho, 2003).

Development for LDCs is being considered through free trade agreements as a way of integrating them into the global trade as means to economic development. Free trade pushed forward by trade theorists is believed to be advantageous for the populace when the supply of goods is allowed to flow freely to meet demand with no government intervention in terms of tariffs, quotas and other non-tariff barriers. According to neo-classicists, engaging in free trade is advantageous to countries because it increases their economies (Sheehy, 2006). Mostly, poor countries usually face issues of accessing market for their products due to rules that regulate markets and taking part in certain trade. Therefore, free movement of goods would greatly have an effect on households' well-being and development of the poor countries at large through increased incomes and foreign exchange earnings.

The US, EU and other developed countries have offered developing countries special market access through preferential trade agreements as early as 1970s and this was in the name of promoting economic growth in LDCs through encouragement of exports (Gil-Pareja and Llorca-Vivero, 2010). Preferential market access of definite goods through lower tariff rates or duty free from developing countries to developed countries is mainly to spur economic growth through export – driven industry in LDCs. The set-up of trade preferences was also due to developing countries request for special and differential treatment during the GATT negotiations (ibid). Widening of market entry not only will improve efficiency and volumes of exports from developing countries but will greatly impact producers through increased earnings and employment benefiting both producers and the country at large.

World Bank cited by Lankes (2002), estimates fixed welfare gains of between \$ 250 billion to \$ 620 annually from the removal of merchandise trade barriers and a third to half of that would go to developing countries plus investment and technology transfer gains (Lankes, 2002). Rise of tariffs is a way of protecting industries in countries that are importing in both industrial and developing countries which would hamper countries trying to advance in technology while limiting their industry and export expansion. This makes them more reliant on commodities whose prices are frequently unstable (ibid). Most developing countries like Rwanda rely on agricultural export whose prices are highly volatile which not only hampers the country's economic growth but affects the population's welfare as well.

Hoekman et al cited in a study done by Lankes insists (2002), that if all Quad countries⁶ offered duty free quota free market access to LDCs like the EU's current schemes of EBA; this might boost their exports by \$ 2.5 billion or 11% (Lankes,2002). Nonetheless, US has taken the same initiative with AGOA even though it has some limitations that LDCs have found hard to stick to like rules of origin and condition set for eligibility. This and subsidization of agriculture in OECD countries keeps LDCs agricultural products off the rich countries' markets by lowering prices for their products and increasing price instability hurting both the poor countries and the population. In LDCs, agriculture contributes around 27% to GDP and exports and is the main economic activity to three quarters of poor people living in rural areas (ibid). A free market access for non-traditional sectors like peace baskets exports to the US through AGOA in developing countries in Rwanda can help alleviate the poor living conditions of the population mainly depending on agriculture. This can be through employment and income earned to complement their subsistence agriculture sector as the major reliant in rural area in Rwanda.

“The costs to the global economy of distortions in agricultural trade are large. Even if only static effects are considered, the welfare costs of agricultural distortions may be over \$ 120 billion. One-fifth of the cost is borne by developing countries, and the export revenues lost are much larger both developing and developed countries suffer the most from their own restrictive policies” (Lankes, 2002: 2).

Developing countries could benefit greatly from further liberalization of agricultural products and textiles and clothing through incomes, exports and employment. However, with current difficulties developing countries face in accessing markets many have managed to develop and expand vibrant export sectors though it would be easier with better access (Lankes, 2002). With some developing countries like Rwanda that have been granted free market access in the US through AGOA can greatly profit through trade and export expansion which in turn can lead to employment and income generation.

⁶WTO term used to define major industrialized country namely US, Canada, the EU and Japan <http://www.maketradeair.com/en/index.php?file=08042002224228.htm&cat=2&subcat=6&select=22>

“The world community and international institution have made development and poverty alleviation a high priority. The Millennium Development Goals, fixed by the United Nations for 2015, call for halving the number of people living on less than a dollar day. With this goal in mind, the international community is calling current global trade negotiations, conducted by the World Trade Organization, the Doha Development Agenda” (Bouët, 2006: 1).

Using a CGE model, Bouët (2006) analysed global outcomes due to full trade liberalization from 1999 to 2005 basing on 16 assessments. The analysis emphasized full trade liberalization increased world welfare from 0.3% according to Hertel and Keeney to 3.1% as per Dessus, Fukasaku, and Safadi all cited by Bouët. Furthermore, numbers of people supported out poverty estimated by Anderson, Martin and Van der Mensbrugge cited by Bouët (2006), ranges from 72 Million people to 440 million according to Cline (Bouët, 2006).

In addition, Bouët (2006) points out that after ten years of putting in practice full trade liberalization; world real income could be raised by 0.33%. Change in trade would increase growth rate in middle-income countries by 0.4%, least developed countries by 0.8% compare to rich countries by 0.3%. It would lessen poverty because benefits would go unskilled labour in developing countries slightly reducing income inequality but all the same the reform might hurt some developing countries. Trade liberalizations means efficient positive distribution of gains but in some countries it may decrease terms of trade due to increasing world agricultural product prices that would harm food importation or could lead to erosion of special markets (Bouët, 2006). A low developed country like Rwanda could gain by accessing developed countries’ markets through increased exports of off-farm production that would lead to increased employment of unskilled labour that’s in abundance leading to somewhat better welfare due to income earned.

Collier and Venables (2007), underline two ways in which trade preferences benefits accumulates; first, through transfer of rent to developing countries. Tariff revenue meant for rich countries’ importer is transferred to exporting countries’ producers. Hoekman et al (2006) cited by Collier and Venables (2007) estimated the amount of rent transfer of around \$ 11 billion annually, least developed countries receiving around \$ 500 million. Secondly, benefits to developing countries due to trade preferences can include considerable response of the export supply leading to employment. Rents from trade preferences for Africa rely mainly on market access for its current agricultural exports while preferences in manufactures could permit breaking into markets that are barely penetrated. Even though agricultural exports rents can also produce quantity effect, quantity effect of manufacturing export is far greater and this is mainly due to being free from decreasing return to scale (ibid). According to Collier and Venables (2007: 1327):

Production of manufactures for the domestic market encounters diminishing returns due to the constraints of small market size. Traditional agricultural and resources-based exports encounter diminishing returns because of limited endowments of suitable land and hence declining resource base per worker. By contrast, employment in manufacturing exports can be expanded without running into diminishing returns to scale due to markets or endowments. The other reason for the greater potential is that manufacturing exports are subject to scale thresholds which can generate multiple stable equilibria. The scale thresholds arise because of well-documented external economies that advantage those firms that are located within a cluster of similar firms. Potentially

viable export locations may be uncompetitive relative to established clusters and so never develop unless induced. Hence, not only may trade preferences in manufactures generate a large supply response, they may switch a location to a new equilibrium and so have permanent effects even if only implemented temporarily (ibid).

However, manufacturing and other non-traditional sector exports are of great importance in the wider course of economic development. Jones and Olken cited by Collier and Venables (2007), show that rising growth rate relates to an average increase of 13% in the share of trade in income over five years' time and a high rate of labour shifting to manufacturing. Rwanda could definitely benefit from accessing a free market for manufacturing sector like handicraft with no diminishing returns like in agricultural sector. Hanson cited by Collier and Venables (2007) further highlights that Mexican exports grew five times in over 12 years due to strong effect of NAFTA leading to increase in employment while a significant effect on the Mexican economy as a whole is a debatable issue (ibid).

Additionally, Mauritius has been able to transform its self from impoverished island dependent on sugar to a high income economy in Africa because it entered into international markets in manufacturing (ibid). Collier and Venables (2007) further cites Subramanian and Roy stressing the reasons for Mauritius's growth success was mainly due to the government allowing duty free imports for the exports production but more importantly OECDs resolution to award Mauritius trade preferences through MFA. The agreement granted Mauritius privilege market access to OECD compared to Asian countries and even though the privilege of accessing market ended in 2004, Mauritius has not only slowly transferred into more complex undertaking in manufacturing but is now well set up in OECD markets. The short-term trade preference arrangement played a significant part in transforming the Mauritius economy permanently (ibid). Preferential market access like AGOA could help a developing country like Rwanda to further accomplish diversification into other sectors like handicraft and establish it's self on the international market through preferential market access. This can support further growth and expansion of the new sector.

Further Collier and Venables (2007), compares the effect of AGOA and EBA on a sample of 86 developing and middle-income countries apparel exports. Provision of AGOA apparel was found to have a positive significant effect relative to exports to EBA. Therefore in order to promote Africa's economic development, EU should devise its trade preferences because its Africa's natural big market (ibid).

Thirlwall (2000), emphasizes that the issue for developing countries and Africa in particular is not whether to trade but what to trade and terms of trade with developed countries or amongst themselves. What is disagreed about is mostly is whether total gains to developing countries could be better and bigger in case the current structure of trade system were any different and if developed countries made changes in their trade policies with developing countries. Thirlwall, cited by Thirlwall (2000) points out that over 60% of developing country's exports earnings; 80% for Africa are from primary commodities transactions whose prices have been falling at around 0.5% annually compared to manufactures for not less than a century. Reducing dependence on agricultural sector could have great effect on population's welfare through creating other source of revenue.

One of the major significant trade benefits is export markets enlarge whole market for producers in a country if production is subject to an increasing return, that way export developments turn into a continues source of productivity growth. Additionally, for a small country there is little possibility for substantial capital equipment investments; specialization is restricted by the market scope. There are some chances of industrialization and dispensation of traditional production methods if poor small countries do trade, without export markets manufacture of numerous goods would economically not feasible (ibid). For that reason, accessing free market for peace basket could have enhanced the ability of weaving a traditional method of production turning into an economic activity capable of creating employment and incomes for household producers.

Other important trade benefits include incentive to compete, gaining of modern knowledge, new ideas and distribution of technical knowledge, and mind-set and institutions changes which the new growth theory terms as type of externalities that maintains marginal product of physical capital from falling improving the country's long-term growth performance (ibid).

Thirlwall (2000), further stresses gains from trade to an individual country based on specialization could be affected by welfare losses of unemployment and deterioration of terms of trade which makes complete specialization not optimal choice. Recent research on regional trade agreement suggests in form of customs unions and free trade agreements reduce growth and investment but unilateral tariff or non-tariff reduction improves growth performance. There is a positive correlation between trade liberalization and export growth but it depends on demand and production of goods produced and exported. Countries specializing in primary products production and export do not perform well compared countries specializing in production and export of manufactured goods (ibid). Thus, free market access for peace baskets can lead to branch out into handicraft exports that can be beneficial to a developing country's terms of trade and increased welfare due to increase in exports and employment instead of concentrating on agricultural products with diminishing return to scale and heavily protected on the international market

3.3.1 Africa Growth and Opportunity Act

As part of the US Trade and Development Act of 2000, AGOA offers increased special access for Sub-Saharan Africa exports to the USA. It modified the US generalized system of preferences program by giving the president the authority to approve the duty-free quota-free treatment for definite non-import sensitive products from countries that are eligible (Seyoum, 2007).

According to 2008 AGOA report by the office of United States trade representative, the past eight years have made a change in US-Africa trade and investment. There has been a new trading opportunity for businesses, thousands of jobs created, and investments worth millions of dollars brought into sub-Saharan Africa. Since 2001, total two-way trade between the United States and sub-Saharan Africa has more than doubled and AGOA imports have increased up to \$44.2 billion in 2007. Non-oil AGOA imports more than doubled, from \$1.4 billion in 2001 to \$3.4 billion in 2007 (USTR, 2008).

On top of GSP market access, AGOA has opened the U.S. market to almost all goods produced in eligible countries and has facilitated the increase in both the volume and diversity of U.S. trade with sub-Saharan Africa. African firms have been able to produce higher value products and become more competitive internationally through provision of new market opportunities for their exports by AGOA, especially of non-traditional and value-added products. This has strengthened sub-Saharan African economic growth and assisted in poverty alleviation in one of the world's poorest regions (USTR, 2008). What's more, producing for a bigger and demanding market improves both products and earning for developing countries producers which directly improves not only their skills and knowledge but also their economic wellbeing.

Therefore, AGOA was revised to AGOA II to increase trade opportunities for eligible countries by qualifying certain articles and activities for duty free treatment in August 2002. It also allowed certain non-LDCs to benefit from AGOA. Further amendment was done in 2004 to AGOA III that extended special treatment for eligible countries till 2015 (Seyoum, 2007). Seyoum (2007), points out a significant increase of 73.4% in US imports from eligible AGOA countries between 2001 – 2003 more than any other countries in same period of time. In 2003, energy products made up a huge part of AGOA imports at 80% followed by textiles and apparel 8.5% and transport and transportation equipment of 5.2% (Seyoum, 2007).

Additionally, there was an increase of about 17% in post AGOA exports (2001-2004) in comparison to the four year before AGOA (1997-2000). Most export products are eligible for the special treatment apart from some agricultural products like refined sugar etc. though GSP offers similar benefits apart from a few products (Seyoum, 2007).

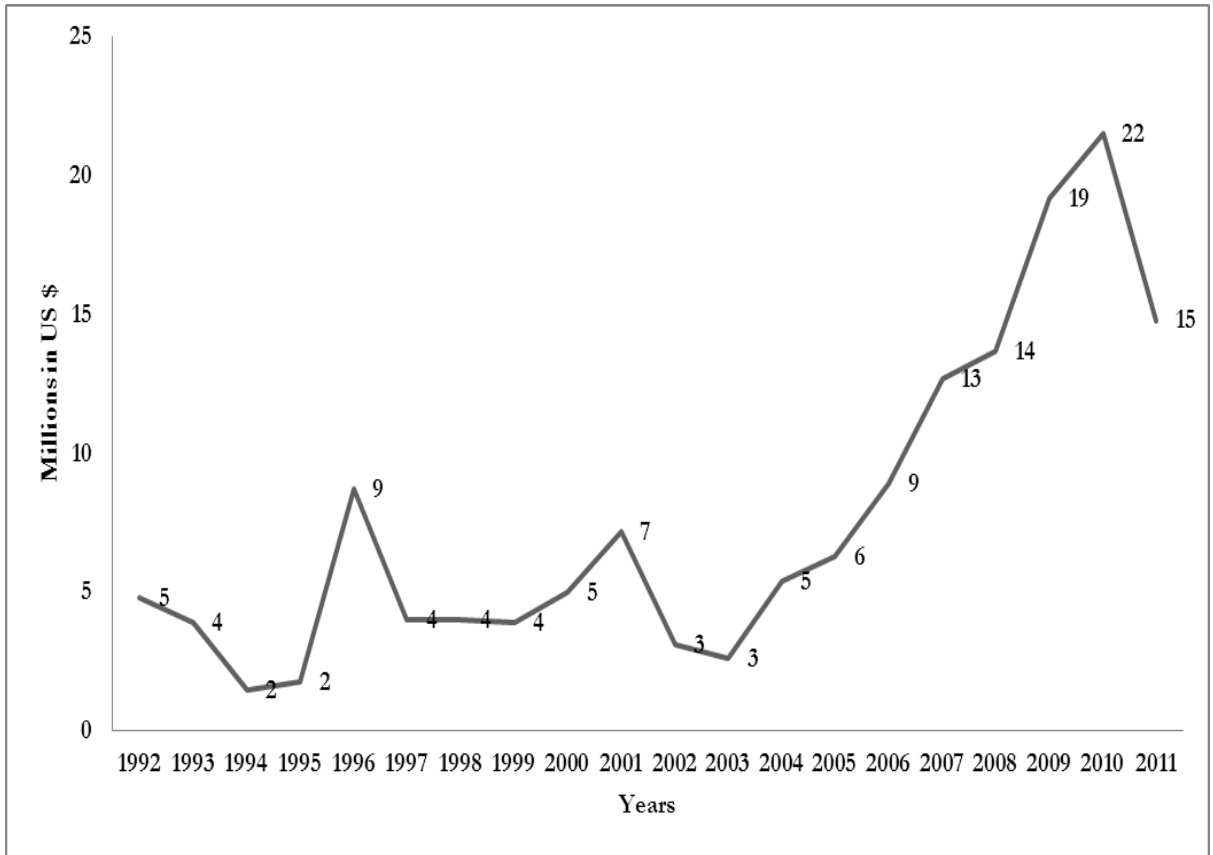
3.3.2 AGOA in Rwanda

In its Vision 2020, the Rwandan government intends to put in place favourable macroeconomic stabilization policies to enhance private sector growth and enlarge domestic resources base to increase exports. This will help the country reduce dependency on foreign aid and develop strategies to expand tax base, attract foreign investors and address the debt situation (Vision2020, 2000). In addition, diversification and development of non-traditional exports need to be promoted to deal with the anti-export bias in public policies. Some of the policies to be put into practice include trade liberalization that will help transform the agrarian subsistence economy (ibid). The government realized that developmental process and capital formation cannot in the long run be achieved by only donor funds, but the backbone should be middle class Rwanda entrepreneurs in order to create wealth, employment and vital innovations through opportunities for profit (Vision2020, 2000). What's more, given the size of the country and its high population density; Rwanda could do well with a sector that takes away the pressure from the land that's inadequate with declining productivity. Also, access to market of non-agricultural product would greatly benefit both individual producers and the country's economy at large through not only lessening the pressure on land by increasing employment in off-farm sectors but also encouraging a sector that offers better remuneration compared to agriculture sector. This will lead to government

promoting better paying exports and raising the GDP per capita to US\$900 in line with Vision 2020.

Comparing at Rwanda’s exports in general to the US before and after AGOA over a period of twenty years were unstable but increased particularly in the early 2000s the time AGOA was signed as indicated by figure 2. Historically, the main Rwanda exports to the US were mostly coffee, tea, minerals and metals. However, non-traditional exports like handicrafts are increasing (Chandra and Rodarte, 2007). Chandra and Rodarte (2007), further indicates that the increase in handicrafts exports is a huge opportunity not only for Rwanda’s non-traditional exports offered by AGOA but also vertical diversification within the coffee chain by increasing greater value fir coffee.

Figure 2: Rwanda’s exports to the US - 1992-2011



Source: US Census Bureau – Foreign Trade⁷

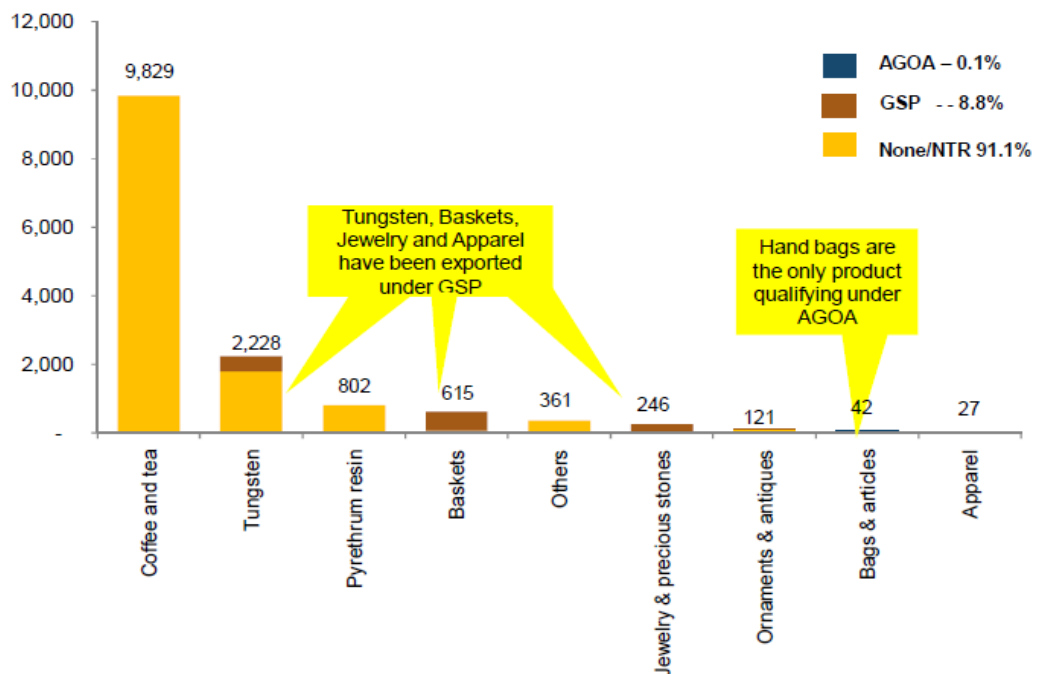
AGOA was recognized as opportunity for Rwanda since it became eligible on October 2nd 2000 and gained apparel eligibility on March 4th 2003. But AGOA remains unexploited with exports under the Act accounting for 1% of total exports in Rwanda (RBD, 2010). There are so many opportunities under AGOA, for example exports under the Act could contribute between 3% to 7% of Rwanda

⁷ <http://www.census.gov/foreign-trade/balance/c7690.html>

exports totalling up to USD 10 – 15 million a year if compatible skills were to be developed that could add 5,000 jobs to the Rwanda economy. Furthermore, servicing the American market would lead the way to finding new export due to servicing new challenging customers (RBD, 2010).

At the moment, several successful exports include handbags and personal accessories, jewellery and home furnishings. Non-traditional export to the US market became the fastest growing between 2007 and 2008, with a yearly growth of 53 % compared to 8.6 % of total exports during the same period. There plans underway from local textile company UTEXRWA⁸ to expand exports under AGOA during the coming years (ibid). Even though since 2000 Rwanda has qualified for AGOA provisions, AGOA remains underutilized particularly in the textile and apparel category. Exports under GSPLDC preferences continue to dominate preference based exports from Rwanda indicated by the Figure below (ibid)

Figure 3: Share of exports from Rwanda to United States by Preferences system in 2008



Source: RDB Strategic Plan

Nevertheless, majority of Rwanda’s exports to the US are currently low value commodities and AGOA’s opportunities are limited and are set to end by 2015 although according to the US Bureau of African Affairs AGOA might be renewed to 2025⁹. Therefore, Rwandan firms should quickly adapt to servicing sophisticated markets, and define sources of strategic advantage outside low-cost segments in order to gain from AGOA preferences (ibid). The country can benefit from both

⁸ Rwanda Textile Industry

⁹ <http://www.state.gov/p/af/rls/rm/2011/163589.htm>

going into high earning segments and also expanding and perfecting the current exporting sectors that can be established and sustained even after AGOA ends in the next few years. This can help other sectors set up themselves in the same markets where say the handicraft sector is already established.

3.4 Handicraft sector and employment in Rwanda

According to Dhamija (1975), one of the major difficulties facing developing countries is employment provision since most LDCs predominantly depend on agriculture that does not provide continuous work and given that most people in rural areas are mostly involved in subsistence agriculture. This leads to large movement of people from rural to currently congested urban areas with no skills to find employment creating excess unskilled labour resulting into taking advantage of especially women who are paid less for the same work (Dhamija, 1975). Expansion of opportunities for better pay employment based on traditional abilities using local raw materials is worthy of considering in development planning (ibid). Rwanda, with a high number of unskilled especially vulnerable women involved in subsistence farming in rural areas or in hard labour jobs like construction with low pay can greatly benefit from market access for handicraft sector like peace basket weaving with flexible working hours and not so tedious in terms of employment.

The growth of international markets for home accessory products and an increased interest in global goods have opened up new market opportunities for artisans making Handicrafts an important productive sector and export commodity for many developing countries (Barber and Krivoshlykova, 2006). Currently, in many developing countries, handicraft production is a major form of employment and makes up a considerable part of the export sector (ibid).

The sector has been accredited as the second largest employing sector following agriculture in most parts of the world and it has been observed that the handicrafts sector is growing and a number of small businesses going into handicraft production will not be decreasing any time soon. The success of the handicraft sector is mainly based on the fact that the sector has distinctive advantage of minimal start-up capital; flexible working hours and the freedom to work at home and manage own business. Additionally, the sector offers an opportunity for seasonal employment to people who have minimal chances of being employed and presents an opportunity for creative, independent entrepreneurs (Barber and Krivoshlykova, 2006).

“Handicrafts are unique expressions of a particular culture or community through local craftsmanship and materials. With increased globalization, however, products are becoming more and more commoditized and artisans find their products competing with goods from all over the world” (Barber and Krivoshlykova, 2006 :1)

As per Goldberg (2007), *“sustainable employment refers to at least a person or family’s employment situation provides a permanent and stable job, wages adequate for food, clothing and shelter, full health benefits, and the opportunity for job advancement” (Goldberg, 2007:2)* Whereas ILO and MDGs, defines decent work as employment that’s productive and pays a reasonable income, freedom, dignity, security, family social protection, prospects for personal growth and social integration and equal prospect for both

men and women. This is a fundamental aspect in the struggle against poverty and hunger in the world (ILO and MDGs, 2011).

In Rwanda, there is a growing economic and social importance of handicrafts in recent years; handicraft production has seen upswing as the industry is seen as a possible business prospect for sustainable income generation. It has attracted more and more artisans, traders and exporters. The sector is perceived as a possible way of mainstreaming the poor in the export business and as such boost the country's economy (Ministry of Trade and Industry, 2011). The sector has enabled households to take part in trade which has enabled to earn an income and improve their well-being as well as expanding exports and trade in the country. Based on the importance and potentiality of the sector, the ministry of trade and industry formed a distinctive Secretariat to facilitate the development of the sector and expedite the implementation of the existing National Handicraft Strategy (Ministry of Trade and Industry, 2009).

The handicraft sector was found to have the potential in creating work and income to a bigger share of rural population, paying special attention to vulnerable sector of the society, especially women, youth and people with disabilities. There around 509 cooperatives bringing together 22,945 organized crafts people and artisans. The sector is recognized as potentially high growth export sector with significant social benefits that can support other export sector like tourism (ibid).

Chapter 4: Methodology

4.1 Introduction

This chapter presents all the methods used to collect, analyse, and interpret the data collected. It includes sampling design, data collection methods and lastly data analysis methods.

4.2 Data collection Method

The data collection tools used were the survey questionnaire carried out through face to face interaction and focus group discussions with the respondents in three districts of Kigali Province; Gasabo, Kicukiro and Nyarugenge. A small survey of 100 weavers (treated group) and 50 non weavers (control group) was intended to verify if baskets woven and exported through AGOA is a source of employment and income and measure its welfare effect on household weavers. Three districts in Kigali Province were picked instead of rural handicraft villages because of limited time and finances.

4.3 Sampling technique

4.3.1 Weavers

In Kigali province there are 2 main weaving projects: Ageseke Project; under the City of Kigali, was implemented to empower poor and vulnerable women with skills for a sustainable livelihood. There are 16 cooperatives under this project that are under one union called Ibanga with over 2,000 women involved in handicraft activities with Japan as their main export market. From the 16 cooperatives, four were picked from the list using systematic sampling, one after every 4th cooperative and the numbers of weavers to be interviewed per cooperative were chosen proportionately from each cooperative. Systematic sampling was used again to select a sample of 50 respondents proportionally from the four cooperatives selected.

However, weavers working with Gahaya links (exporter to the US market) are not so well organized in cooperatives but weave from the same premises belonging to the company, there are over 4,000 weavers in both Kigali and in rural areas. Volunteer sampling was used to come up with the sample of 50 weavers to be interviewed. After an introduction and main purpose of the research, 50 women weavers volunteered for the interview. The volunteer sampling method can be highly unrepresentative even though it's a reasonable way of guaranteeing a satisfactory number for a study (Black, 1999).

4.3.2 Non Weavers

A sample of 50 non weavers was selected using snowball sampling method. Since all the 3 groups were in the same socio-economic position before weaving because they were involved in the almost in the same kind of work, women weaving were

asked to help identify households in their neighbourhoods that are not involved in weaving but are in same economic situation like the weavers before. Some non-weavers possess weaving skills either learned since childhood or through training during various trainings by NGOs and Kigali city council. At the end of the interview, women weavers were asked to describe a household in their neighbourhood who does the same job like them before they started weaving. Description involved the household size, jobs, estimating how much they earn, marital status and their current wellbeing, etc. After the description, they were asked if it's possible to meet and interview the pointed out households. Some interviewees were sceptical, some declined and others accepted after explaining the main reason for the research with the help of cooperative heads. Out of 100 weavers, 83 were willing to identify a household to be interviewed; out of 83, 50 non weavers were systematically selected to be interviewed as the control group. Snow ball sampling method does not guarantee that the sample is representative of the population (Black, 1999).

4.4 Data Analysis Technique

For the analytical purposes, a causal analysis was not possible due to a cross section data set; study only determines the relationship between the peace baskets exports through AGOA and household welfare. Data collected through questionnaire, in-depth interviews and FGDs was analysed through descriptive data analysis techniques and exploratory econometric techniques, graphs, and tables. A nonparametric test, independent sample t-test was applied at 5% level of significance to compare the mean difference and standard deviation and between weavers and non-weavers and between US and Japan market weavers per variable. Comparison of key household characteristics weavers and non-weavers basing on mean difference and standard deviation was used to assess non-weaver's validity as control group for weavers. Furthermore, bivariate analysis was used to determine the difference in household welfare due to weaving between groups. In addition, multiple regressions was used to further estimate the effect of the Act on the household welfare using three models. This helped identify the effect of the Act through basket weaving has had on weavers in comparison to non-weavers and those weaving for the US market in contrast to Japan market weavers basing a 5% level of significance. What's more, the macro impact on micro levels was verified in the course of export volumes to different markets and welfare improvement through income earned and labour supplied by households.

4.5 Questionnaire and Variables

Questionnaires were addressed to households weaving and non-weavers containing demographic, educational level and socio-economic characteristics that were intended to answer the research questions. Others interviewed included people working with the government institutions e.g. the Handicraft Secretariat, Private Sector Federation, Rwanda Development Board, Exporters etc. The characteristics are linked to the measuring of basket weaving as a sustainable source of employment and income and its effect on household's welfare.

4.6 Model estimation

Further emphasis of effect of AGOA on household's welfare is measured by comparing weavers and non-weavers, US and Japan market weavers using a multiple regression analysis. A causal analysis is not possible due to cross sectional data with no records of socio-economic status of weavers before the free trade agreement.

Two variants of the model are estimated using: i) linear-linear model using the equation 1 and ii) log linear model using equation 2. For each of the model three different specifications are used to estimate monthly income, amount saved and intra household bargaining power as dependent variable. Lastly, monthly income will be included as one of the explanatory variables for estimations of amount saved and intra household bargaining power as dependent variables. The models will attempt to estimate the effect of the AGOA on households' welfare by estimating income, amount saved and bargaining power depending on whether a person weaves or not or weaves for the US or Japan markets in addition to bivariate analysis. Ordinary Least Squares (OLS) method is used to estimate monthly income and amount saved whereas probit as model is used for estimating intra household bargaining power which is a dummy dependent variable. This is measured by looking at the effect of belonging to a different group or weaving for a different market on income earned, amount saved and bargaining power. Whether weaving or weaving for a certain market has an effect on the three dependent variables while controlling for household social demographic characteristics.

Equations

$$\text{Monthly income} = f(G) \dots\dots\dots (1)$$

$$\text{Amount saved} = f(G) \dots\dots\dots (2)$$

$$\text{Intra household bargaining power} = f(G) \dots\dots (3)$$

G= group (weavers and non-weavers/ US and Japan market weavers)

Linear-Linear equation 1

$$y = \beta_0 + \beta_1g + \beta_2age + \beta_3ms + \beta_4sc2 + \beta_5sc3 + \beta_6hs + \beta_7hr + \beta_8m + \mu \dots (1)$$

Log-linear equation 2

$$\ln y = \beta_0 + \beta_1g + \beta_2ag + \beta_3ms + \beta_4sc2 + \beta_5sc3 + \beta_6hs + \beta_7hr + \beta_8m + \mu \dots (2)$$

g – Group; belonging to a different group of either weavers or non-weavers or weaving for different markets is expected to have an effect on a household's monthly income, amount saved and intra household bargaining power. A positive relationship on three variables is expected for a group belonging to US market weavers with a free market access due to some extent a high income. **age** – Age is in the ranges (midpoints for age range). **MS** – Marital status; binary dummy from four previous responses to yes/no responses, **Sc2 & Sc3** – Education is in levels; 1- No education; 2-Primary level; 3-Secondary; 4- Tertiary. 1- No education is set as a reference to determine the effect of having primary and secondary education level on households' monthly income. **hs**– Household size, **hr** - Hours per day are expected to have a positive effect on monthly income earned and amount saved.

More hours worked can lead to more income earned which in turn can lead to increase in amount saved. **m**– Monthly income as an independent variable is for amount saved and intra household bargaining power equations.

Table 3: Variable and their codes

Age range		17.5	27.5	37.5	47.5	57.5
Household size range		3	5	7	9	
Monthly Income range	0	20,000	45,000	70,000		
Hours/day	0	4	6	8	10	
Amount saved range	0	7,500	17,500			
Codes	0	1	2	3	4	5
Marital Status		Single	Married	Divorced	Widowed	
Educational Level	None	Primary	Secondary	Tertiary		
How many work	None	One	Two	Three	Four	
Satisfaction with current financial situation		Fully satisfied	Somewhat satisfied	Less than satisfied	Not all satisfied	
Financial situation in 2-3 years		Improve a lot	Slightly improve	Remained the same	Deteriorate	
Current level of expenditure on food and other basic necessities like clothing & housing		More than adequate	Adequate	Less than adequate	Don't know	
Saving		Yes	No			
Other Investment	None	Small business	More assets e.g. livestock, land	Others-Farm inputs, hired labour		
Intra household bargaining power		Better	Same	Worse		
Household economic situation in comparison to other in your community		Feel among the well - off	Not rich but manage well	Neither rich nor poor	Poor	

Scale Description

Age - In the questionnaire, age was in intervals and coded 1-5 respectively;

1.15-20; 2. 25-30; 3. 35-40; 4. 45-50; 5. 55-60

During analysis, the age mid points from age intervals were use.

Household size – Number of household in the questionnaire were in intervals of between 2-4, 4-6, 6-8, 10 & more and they were coded 1-4 respectively. Mid points for household's size were used for further analysis.

Monthly Income – household's monthly income were captured in ranges; no income, 10,000 – 30,000, 40,000-50,000, 60,000 & above and were coded 1-4 respectively and bivariate and multiple regression analysis, mid points were used.

Hours /day – hours worked per day were 0, 4, 6, 8, and 10 and coded 0-4. For analysis hours worked remained the same.

Amount saved – amount saved per month ranged from 0, 5,000 – 10,000 and 15,000 – 20,000 and were coded 0-3. For analysis, mid points for amount saved were used for both bivariate and multiple regression.

Marital status – status ranged from single, married, divorced to widowed and they were coded 1-4 respectively. For multiple regression analysis, marital status was made into a binary dummy of married (1) and unmarried (0).

Educational Level – level ranged from None, Primary, Secondary to tertiary and coded 1-4 respectively. For multiple regression analysis, educational level variable was changed and tertiary level was dropped due to few respondents.

How many work in a household - this variable ranged from 0-4 and coded 0-4 respectively and remained the same for analysis.

Satisfaction with current financial situation – classified from fully satisfied, somewhat satisfied, less than satisfied and not at all satisfied and the codes were 1-4 respectively for bivariate analysis.

Financial situation in 2-3 years – estimates for near future financial situation rankings were from improve a lot, slightly improve, remain the same and deteriorate and were coded 1-4 respectively.

Current level of expenditure on food and other basic necessities like clothing & housing – responses to this question ranked from more than adequate, adequate, less than adequate and don't know that were coded 1-4.

Saving – responses consisted of YES and NO coded 1 & 2.

Other investments – included none, small business, more assets (e.g. livestock, land) and other (farm inputs, hiring labourers) with codes from 0-3.

Intra household bargaining power – question responses were better, same and worse; coded 1-3. For multiple regression analysis, responses were changed to yes and no.

Household economic situation in comparison to others in your community – responses to this question were feel among the well-off, not rich but manage well, neither rich no poor and poor which were coded 1-4 respectively.

Chapter 5: Analysis and Interpretation of Data

5.1 Introduction

This chapter talks about the analysis and discussion of the research findings with the intention of responding to the research objectives. Data analysis is discussed on two levels; Macro and Micro level. On the Macro level, the analysis and discussion of data is done to highlight AGOA's role in development of Peace basket exports by indicating the export volumes per year to different markets and on the Micro level, is to analysis and discuss Act's effect on the households' welfare due to basket weaving.

5.2 Macro Level

On the macro level, export volumes to different markets are compared for a period of nine years in order to illustrate the potential effect of the duty free quota free market access on the handicraft sector.

Handicrafts were not a major focus for exports in Rwanda; artisans produced for tourists and for the local market but a resolution by the government to promote diversification of exports put much importance on the sector and after, there has been a noteworthy growth in exports (Plunnkett, 2008). The government, according to the Handicraft Secretariat in the Ministry of Trade and Industry recognized the *“potential of the handicraft sector to create employment and income for a big percentage of uneducated vulnerable women, youth and people with disabilities in both rural and urban areas in addition to earning foreign exchange for the country”*. The government policy coincide with other Non-governmental organization like GTZ that were supporting the sector and AGOA that offered duty free market access that lead to the expansion of peace baskets exports in particular and the formalization of the handicraft sector today in Rwanda¹⁰.

5.2.1 Export Volume to different markets –Macro level effect

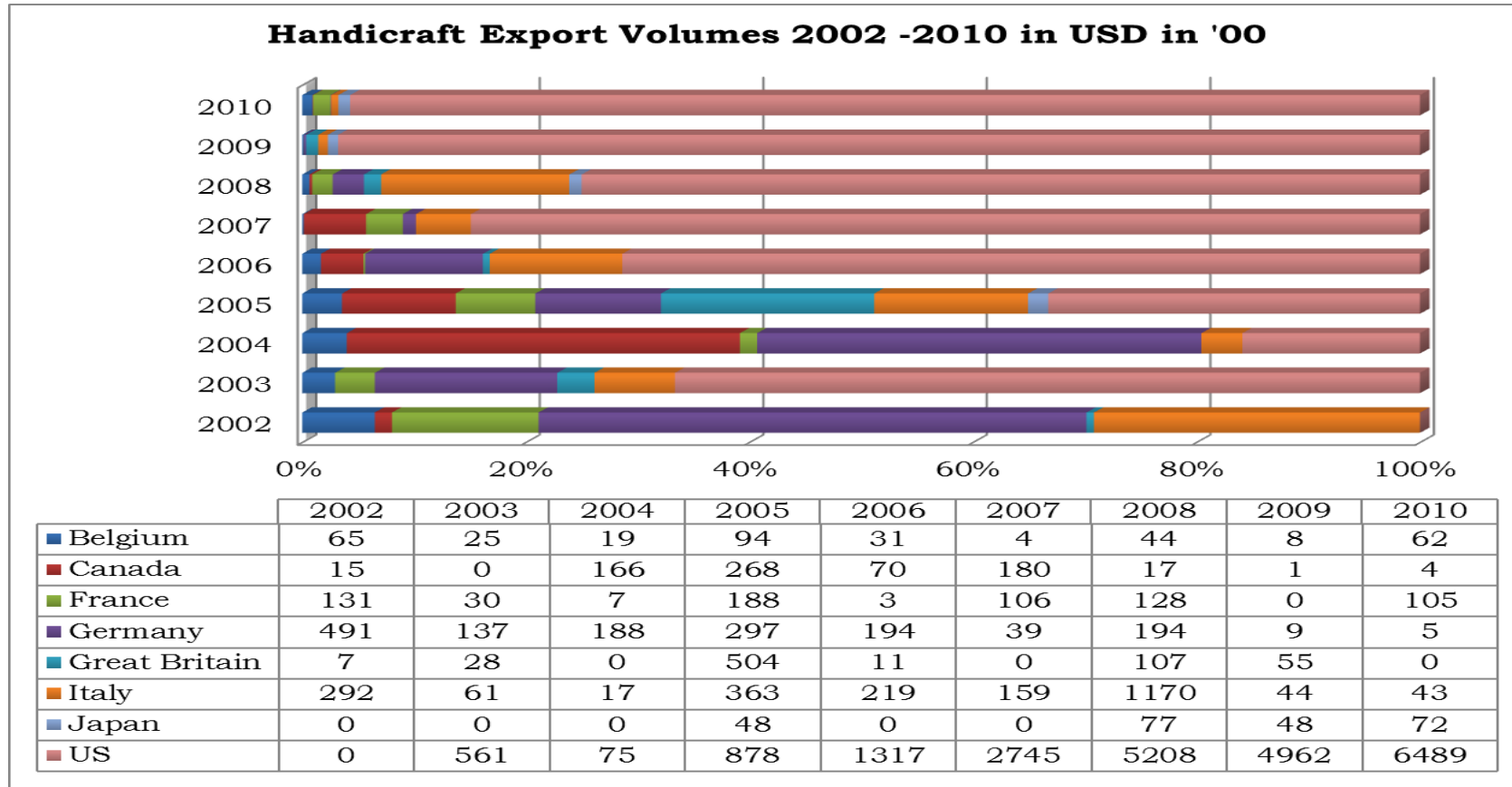
Export volumes of handicrafts in Rwanda have increased substantially especially to the US market and not much to the European countries over a period of ten years. As earlier stated this has been to a big extent due to government policy to diversify exports and carter for women war survivors who were heads of families with no source of income. With preferential market access through AGOA, it offered an opportunity that helped expand the new sector and this was not only by accessing market but also modernizing the crafts products and improved the efficiency of weavers through serving a challenging and demanding American market. Weavers and exporters had to keep up with US market dynamic which a certain extent led to improved products and product diversification other than peace baskets alone.

¹⁰ Interview with head of Crafts Secretariat in the Ministry of Trade and Industry

Exports have shifted from the original local baskets to diversifying into different colours, materials used and shapes to different products like jewellery made from different materials. Before 2003 - 2004, there were very little exports and inadequately captured by customs which has made the comparison of before and after AGOA export volumes not possible. After 2003 - 2004 there has been a significant increase in export volumes especially to the US market though exporters complained about decline in exports due to the financial crisis which have not fully picked up yet like years preceding the financial crisis. In 2002, 50% of total exports in Rwanda were to Germany and 30% to Italy and in 2003 there was a big change with over 70% of total exports were to US compared to 0% in 2002. Export volumes decreased greatly in Germany and Italy to almost 16% and 7% respectively. Whereas handicraft exports from Rwanda to European countries decreased between 2002 to 2010, exports to US increased; in 2003, almost 70% of the total handicraft exports in Rwanda were to US market and this has increase over the years to over 95% in 2010. In an interview with Gahaya link's manager, the main exporter in the country to the US market; they took advantage of duty free market access after the government and the US embassy's AGOA campaign to the local companies was launched. Like any other exporter they were happy with availability of duty free market where she would compete with other exporters from different countries without paying taxes. On top of benefiting from a duty free quota free market access to the US, they are given support in form of capacity training, marketing and new product designs in order sustain their products on the international market. Nevertheless, not all exporters are aware of the AGOA and free market access opportunity in the country because not most of them have made an attempt to take advantage of the Act and this was revealed by talking to heads of unions for some cooperative.

Therefore, free market access through the Act has had to some extent a profound effect on the trade expansion of handicraft sector, peace baskets in particular. This has been mainly through new ideas and knowledge, incentive to be innovative and competition that has somehow led to expansion of exports, trade creation and facilitated in formalising handicraft sector and creating an ideal employment for a number of uneducated vulnerable women not to mention its role to other sectors like tourism. Demand for handicraft products is estimated to grow in the country with the growth of the tourism sector in the country, local as were as international markets. On the Micro level, US and Japan market weavers are compared to examine the effect of AGOA on household's welfare through weaving mainly because they are somewhat both consistent importing countries of peace baskets in Rwanda even though Japan imports volumes are minimal compared to the US market. This may be to some extent due to a free market access through AGOA in the US.

Figure 4: Handicraft export volumes 2002-2010 USD '00 in Rwanda



Source:

Rwanda

Customs

5.3 Micro Level

The study analyses the difference between weavers and non-weavers to show any difference in household welfare due to basket weaving and determine any differences between US market weavers and Japan weavers to justify AGOA's effect on household weavers for the US market. Comparison is done between US and Japan markets because currently they are more somewhat steadfast and bigger markets for peace baskets in Rwanda compared to other countries.

Basing on mean difference and standard deviation of key household characteristics of the three groups, non-weavers are taken as the control group and a baseline to determine any difference in the households' welfare due to weaving i.e. due to income earned for both US and Japan market weavers (treatment groups). To estimate the effect of the AGOA on household weavers, weavers for US market are compared to Japan market weavers on basing on a number of variables.

Table 4: Description of Respondent's social demographic characteristics

Households characteristics	Mean		Mean differences	Standard deviation	
	Non-weavers	Weavers		Non-weavers	Weavers
1. Age	29.1	37.3	*** 8.2	8.417668	11.09919
2.Marital Status	2.32	2.1	0.22	1.168288	1.077783
3.Educational level	1.78	1.94	0.16	0.5816935	0.5283861
4.Household size	5.76	5.48	0.28	2.015856	2.012486
5.Other sources of Income	3.04	2.68	0.36	2.649297	2.45723
6.Hours/day	6.84	7.76	*** 0.92	4.102563	1.341791
7.Monthly Income	21,200	35,000	*** 13,800	15,797.18	16,283.47

Source: Primary Data

As earlier indicated, weavers and non-weavers were to some level in the same socio-economic situation before weaving given that a number of non-weavers possess weaving skills learned during trainings or as a tradition and do the same work weavers did before weaving. Therefore, even with some differences between the two groups; non-weavers make to some degree a valid control group for weavers basing on their demographic characteristics. There are no difference between non-weavers and weaver's marital status, household size, other sources of income and educational level. Level of education influences the shift of individuals from agriculture to off-farm employment (EICV2, 2007). But weavers and non-weavers differ in age; weavers are older than non-weavers by 8 years.

Additionally, respondents' household size on average is 5.76 for non-weavers and 5.46 for weavers, justified by the household survey which indicates that a household contains on average five members in Rwanda,

(EICV2, 2007). There is no statistical difference between weavers and non-weavers in terms of household size as specified by the mean difference of 0.18. What's more, other source of income per households does not differ between weavers and non-weavers as indicated by the statistically insignificant mean difference of 0.36. The difference of close to one hour between weavers and non-weaver's working hours is significant. Further emphasized by the Household survey (2007) in Rwanda indicate that on average, off-farm labourers work for 8 hours per day on their main jobs (EICV2, 2007). Non-weavers are involved in street hawking, small scale farming, construction site jobs, food vending, hired labourers on other people's farms etc. Even though weavers work more time, they earn more and working hours are flexible because they work at home and take care of their families unlike non-weavers who work away from home. According to the household living standard measurement in Rwanda (EICV2), women do on average 20 additional hours managing their homes and families (EICV2, 2007). Non weavers work the whole day away from homes and do intensive labour jobs that do not allow them to work throughout the week leading to less earnings.

Conclusion

Basing on mean difference values, weavers and non-weavers differ in age, working hours and income earned. Even with the indicated differences amongst the 150 respondent's demographic characteristics, non-weavers make a somewhat valid control group for weavers (treatment group) and could be used as a baseline to analyze if weaving due to the Act has had any effect on household weaver's welfare.

Table 5: Bivariate analysis for weavers, non-weavers and for US and Japan market weavers

	Variables	Mean		Mean difference	Standard Deviation		Mean		Mean difference	Standard Deviation	
		Non Weavers	Weavers				US Market	Japan Market			
1	Monthly Income	21,200	35,000	*** 13,800	15,797.18	16,283.47	40,500	29,500	*** 11,000	15722.4	15059.41
2	Satisfaction with current financial situation	3.06	1.96	*** 1.1	0.6824326	0.2814106	1.96	1.96	0	0.3475864	0.1979487
3	Financial situation in 2-3 years	3.5	1.49	*** 2.01	0.6468132	0.6741249	1.48	1.5	0.02	0.6141196	0.7354022
4	Current level of expenditure on food and other basics necessities	2.62	1.96	*** 0.66	0.4903144	0.315268	1.88	2.04	*** 0.16	0.3282607	0.2828427
5	Concern for providing for food and basic necessities for family in 2-3 year	1.72	2.61	*** 0.89	0.7570081	0.5485518	2.7	2.52	0.18	0.5050763	0.5799367
6	Saving	1.76	1.1	*** 0.66	0.4314191	0.3015113	1.06	1.14	0.08	0.2398979	0.3505098
7	Amount saved	2,150	9,125	***6,975	3912.63	6023.68	9,750	8,500	1,250	6,473.06	5532.833
8	Other Investments	0.6	1.12	*** 0.52	1.124858	1.257543	1.66	0.58	*** 1.08	1.205599	1.070762
9	Intra household bargaining power	2.54	1.27	*** 1.27	0.7059514	0.446196	1.28	1.26	0.02	0.4535574	0.4430875
10	Household economic situation in comparison to others in your community	3.26	2.04	*** 1.22	0.7230886	0.7236272	2.18	1.9	** 0.28	0.7475129	0.6776309

5.3.1 Comparison between weavers and non-weavers

As indicated by the mean difference, there is a significant difference between weavers and non-weavers' incomes, signifying a difference in households' earnings that could be to some extent due to weaving. Most non weavers earn on average Rwf 21,200 (US \$ 35)¹¹ per month while weavers earn on average Rwf 40,500 (US \$68) per month. Annually, weavers earn \$ 810 more than non-weaver's \$ 420 exceeding the country's GDP per capita of US \$ 540¹² and close to the targeted GDP per capita of US\$ 900 by the country's vision 2020¹³. Basing on the household survey (2007), welfare condition of the labour force has a lot to with their employment status. The poorest are paid farm labourers falling in the lowest consumption quintile followed by the family farmers and most well-off people are paid off-farm workers almost half are in the top quintile (ibid). Weavers are somewhat contented with their current financial state compared to non-weavers given their higher earnings and secure job. Statistically, there is a significant difference in weavers and non-weavers' satisfaction with their current financial situation which indicates a difference in their welfare that could be to some degree due to weaving.

Likewise, non-weavers are not confident about their financial situation in the future compared to weavers and this could be relatively due to difference in the economic activities, low earnings and some being unemployed. Majority of non-weavers are engaged in street vending or hawking of food, clothes and so many other products that's illegal on the streets of Kigali city where they are mostly arrested and their goods confiscated by authorities. Making them uncertain of their future earning and welfare for their families plus they are not organized in cooperatives like weavers. Where in case of any financial concerns weavers rely on loans from their cooperatives on top of earning a higher income and being able to save and guarantee any future unforeseeable. Also, most women weavers attribute their confidence in future of their financial state to continuous training in different products and managerial and entrepreneurial skill for future sustainability and improved quality of their work and in return better welfare even though a few are sceptical due to unreliable market for their products especially weavers for the Japan market.

Furthermore, result indicates that weavers have sufficient level of expenditure on food and other basic necessities and this is due to somewhat low unreliable incomes on the part of the non-weavers. For example, women who work at construction sites work on average 3 – 4 days a week because of limited availability of work or due to the exhaustive/hard labour work which limits their ability to work more days in a week and in return lowering their earnings as well as their welfare. Non weavers are more concerned about providing for their families with food and other basic necessities in the future

¹¹ Exchange rate at 1 US \$ = 600

¹²http://statistics.gov.rw/index.php?option=com_content&task=view&id=260&Itemid=337

¹³ GOR Vision 2020, 2000

compare to weavers and its mainly due to job insecurity and others being unemployed. Most of them have no guarantee for their jobs because they are involved in illegal activities like street vending or work at construction sites that are not on permanent basis. On the other hand, women weavers are less worried because of secure work and regular income due to weaving and belonging to cooperatives as means for survival. As pointed out by Khosa *“Households rely on community-based networks, particularly cooperative arrangements organized by women. Not only are these networks survival mechanisms, but they can also lead to more secure livelihoods for entrepreneurial women”* (Khosa, 2001:232).

Since saving depends mainly of income earned, weavers save more than non-weavers and partly due to a higher income and working in cooperatives that advises them to save as almost all weavers have an account in local community banks and train in different entrepreneurial and managerial skills. There is a significant statistical difference in saving and amount saved between weavers and non-weavers which can be attributed partially to unreliable incomes on the part of the non-weavers due to their insecure low earning jobs. Similarly, there is an improved intra household power amongst weavers primarily owing to some extent to having a job and earning an income as compared to non-weavers. Weavers attribute limited violence and better improved decision making and understanding to the fact that they bring money into the household and don't heavily rely on their husbands for all household expenditures. Husbands are grateful and supportive because of the contribution made to the family unlike in the past were the task was entirely left for men only. On top of earning an income, they take care of their homes due to flexibility of their jobs unlike non weavers with odd jobs working long hours that keep them away for a long time which at times lead to misunderstanding in their homes. According to Varshney (2011), income generation alone might not raise women's socio-economic conditions; their economic ability should be accompanied by their political ability in order to improve their household bargaining power at home and at work.

The fact women have acquired skills and have jobs to go to every morning, women weavers to an extent feel privileged amongst others in their communities. They feel fairly well off or manage well because unlike before they earn an income and are able to take their children to school, pay for mutual health insurance, better feeding and provide clothes for their children. Weavers are economically better off than non-weavers as indicated by the statistically significant mean difference

Conclusion

As pointed out by the sample analysis, there is a considerable difference between weavers and non-weavers on all aspects of their socio-economic situation. They differ in income earned, satisfaction in both current and future financial situations, and current and future provision of food and other basic necessities for their families, intra household bargaining power etc. Thus, weaver's welfare is reasonably better in comparison to non-weavers indicating a somewhat improved standard of living mostly due to reliable and regular source of income earned from weaving.

5.3.2 Comparison of the US and Japan market's Weavers

By means of bivariate analysis, there is a difference in income earned between US and Japan Market weavers with a statistically significant mean difference of 11,000. Majority of the US market weavers' earn on average Rwf 40,500 (US \$ 68) per month, whereas Japan market weavers' earn on average Rwf 29,500 (US \$ 49) per month. The difference in income can be attributed to mostly a duty free quota free market access that has provided a more reliable market for producers and exporters of peace baskets. Besides, difference in income earned does not only depend on difference in markets supplied but also difference in income earned amongst weavers supplying the same market to some extent also depends on personal handwork.

Even though there is a difference in income earned, there is however, an insignificant difference in savings and amount saved between the two groups of weavers; with US market weavers saving Rwf 9,750 compared to Rwf 8,500 savings by Japan weavers. This can be explained partly by Japan market weavers belonging to well organized cooperatives that encourage them to save despite their lower earnings compared to weavers for the US market. But, there is no difference in respondent's satisfaction with their current financial situation. This can be explained by the fact that even though weavers for the Japan market earn less than weavers for the US market, they are somewhat assured of their financial situation because of savings and emergency loans from their cooperatives. Most of them are to some extent satisfied with their current level of financial state due to the fact that unlike before they earn an income that's made a difference in their daily lives plus the continuous training in different products and skills is kind of an assurance to their financial conditions.

What's more, in terms of investments made differ between US and Japan market weavers and it's statistically significant with mean difference of 1.08 even though there is no difference in saving and amount saved. Most weavers for the US market have made investment in other income generating businesses like small shops in the neighbourhood for food and other home necessities, livestock farming e.g. goats, rabbits, edible rats, cattle etc. and a few in farm inputs and hired labour for farming on mostly hired plots of land. Furthermore, they regard their current level of expenditure on food and other basic necessities more adequate. This can all be attributed partly to a higher income earned from weaving and accessing a quota free duty free market through AGOA that's reliable than the Japan market.

Both groups of weavers have experienced ease in economic conditions relatively due to weaving; most of them are able to pay for expenses at unlike before, have more regular meals, pay school fees and mutual health insurance, rent etc. This has made them more optimist about their future financial situation due to continuous training and capacity building in different skills, products other than baskets alone and government policy in place to promote the handicraft sector. This has made them less concerned about meeting their food and other basic necessities expenses in the near future. Weavers for the US market regard their current level of expenditure on food and other basic

necessities more adequate than weavers for the Japan market. This can be to some degree due to a higher income and a more reliable market for their products.

Conclusion

Therefore, there is a notable difference between US and Japan market weavers in terms of income earned due to mostly weaving for the US market that's free and reliable accessed through AGOA. US market weavers earn a higher income; have adequate current levels of expenditure on food and other basic necessities, invest more in other sources of income and feel are better off among others in their communities. This is further emphasized by the movement of weavers from cooperatives exporting to Japan market to those weaving for Gahaya links an exporting company to the US market, and its mostly because of a more somewhat weaving for an somewhat established market with more export volumes compared to Japan market.

5.3.3 Multiple regression analysis

Table 6: Evaluation of weavers and non-weavers

VARIABLES	(1) Monthly In- come	(2) Log-linear Monthly In- come	(3) Amount Saved	(4) Log-Linear Amount saved	(5) HH Bargaining Power
Weavers	14,395*** (2,996)	0.214** (0.100)	6,045*** (1,008)	0.272*** (0.0936)	1.801*** (0.335)
Age	-150.9 (132.2)	-0.00342 (0.00402)	-86.39* (46.71)	-0.00645 (0.00412)	-0.00440 (0.0126)
Marital status	-123.4 (2,609)	-0.0314 (0.0769)	-261.9 (897.9)	-0.0833 (0.0800)	0.423* (0.254)
Schooling2	-5,059 (3,283)	-0.0901 (0.0963)	1,323 (886.4)	0.0293 (0.106)	-0.207 (0.288)
Schooling3	-516.4 (5,089)	0.117 (0.154)	2,000 (1,992)	0.217 (0.185)	-0.880* (0.486)
Household Size	2,956** (1,316)	0.0950** (0.0393)	-271.5 (443.2)	0.00732 (0.0411)	0.119 (0.126)
Hours/day	2,009*** (375.3)	-0.0326 (0.0268)	-34.84 (142.5)	0.0123 (0.0249)	0.0436 (0.0495)
Monthly Income			0.108*** (0.0302)	5.75e-06** (2.54e-06)	9.19e-06 (7.66e-06)
Constant	8,055 (5,986)	10.39*** (0.280)	2,425 (1,830)	8.881*** (0.308)	-1.957*** (0.569)
Observations	150	138	150	96	150
R-squared	0.271	0.102	0.376	0.158	0.3088

Standard errors in parentheses

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Basing on the multiple regression analysis results, they seem to be in agreement with results assessed through bivariate analysis as there is a difference between weavers and non-weavers mostly in monthly income earned, amount saved and intra household bargaining power. Monthly income is influenced by the fact that an individual weaves or not; weavers earn Rwf 14,395 more than non-weavers; weaving leads to change in monthly income by 21% compared to non-weavers. Age, marital status, do not have any effect on income earned but hours worked per day and household size have a significant effect on monthly income earned.

Also, since savings rely mostly on income earned; weavers save extra Rwf 6,045 compared to non-weavers and savings change by 27% if a person weaves as an economic activity. Monthly income and age have an effect on amount saved whereas marital status, working hours per day and household size do not have any effect on amount saved. What's more, there is a better intra-household bargaining power amongst weavers than non-weavers and this is partly attributed to somewhat the ability to earn an income and not asking for money from their husbands all the time and contributing to household expenditures. Secondary education completion somehow does not have much influence on decision making in a household basing on 5% level of significance. While citing other studies done by Heaton, Huntsman and Flake (2005), Malhotra and Mather (1997); Acharya (2008) study carried out in Nepal finds having a primary or secondary level education is not related with any increase or decrease in decision making in a household compared to having no education and that the education empowers women claim other things being constant is thus not always the case (ibid).

Table 7: Evaluation of US and Japan weavers

VARIABLES	(1) Monthly Income	(2) Log-linear Monthly Income	(3) Amount Save	(4) Log-linear amount save	(5) HH Bargaining Power
Group	10,653*** (3,195)	0.328*** (0.0919)	-1,090 (1,359)	0.0340 (0.106)	-0.193 (0.306)
Monthly Income			0.115*** (0.0400)	6.58e-06** (3.11e-06)	1.14e-06 (9.08e-06)
Age	-111.2 (150.2)	-0.00282 (0.00431)	-117.4** (56.60)	-0.00530 (0.00440)	-0.0135 (0.0145)
Marital Status	-3,326 (3,329)	-0.103 (0.0913)	589.8 (1,227)	-0.0790 (0.0919)	0.542* (0.304)
Schooling2	-4,595 (4,271)	-0.109 (0.114)	-504.6 (1,400)	0.0120 (0.113)	-0.797* (0.418)
Schooling3	2,269 (6,085)	0.0879 (0.165)	1,611 (2,872)	0.191 (0.196)	-1.133* (0.617)
Household Size	3,132* (1,662)	0.0846* (0.0472)	-468.2 (558.0)	0.0236 (0.0446)	0.193 (0.145)
Hours/day	-1,044 (1,252)	-0.0312 (0.0337)	454.4 (520.1)	0.0523 (0.0425)	-0.0252 (0.120)
Constant	40,464*** (13,445)	10.50*** (0.363)	7,403 (4,971)	8.731*** (0.416)	1.351 (1.268)
Observations	100	100	100	83	100
R-squared	0.180	0.193	0.156	0.157	0.0941

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Multiple regression analysis results reveal the same results as the bivariate analysis signifying a difference among weavers for US and Japan markets in terms of monthly income, although there is no difference in amount saved and intra household bargaining power. A weaver for the US market earns Rwfs 10,653 more than a weaver for the Japan market and weaving for US market leads to a change of 33% in monthly income. Monthly income earned is significant to amount of savings while marital status has an effect on the household intra bargaining power for US market weavers. Additionally, age, marital status and hours worked per day do not have any effect on income earned but household size to some extent has a significant effect on monthly income earned. Primary and Secondary level of education does not have much effect to household decision making for US market weavers basing on 5% level of significance.

5.4 Peace basket weaving as a source of employment and Income

Peace basket weaving has not only offered weavers an adequate wage that has enabled them to a certain degree live a satisfactory life but has also provided them with an established stable employment. Weaving has been an established economic activity since early 2000s with increase in exports over a period of time. Handicraft exports have increased by nearly 700% between 2002 and 2010 signifying a growing market for the Rwandan crafts products. The sector employs more than 22, 945 people in over 509 cooperatives and this indicates a somewhat stable employment for household weavers who have been employed in the sector for over a period of 10 years. Agaseke Project under Kigali City Council is still training more ladies to join the 16 cooperatives on top of ongoing trainings of the already set up weavers.

Additionally, to increase of exports/production over time, weavers or artisans are trained in different skills to improve their expertise including new products and entrepreneurial and managerial skills. This has enabled them to diversify in different products like jewelry and not only rely on baskets which can be helpful in both increasing incomes and exports. Through ongoing trainings, household weavers are equipped with prospects to advance in their employment and earnings.

As earlier indicated, weavers earn an adequate income that's able to sustain their livelihoods. Weavers, majority who have been weaving for almost five years and more are able to not only have regular meals but also take their children to school and pay for mutual health insurance. There is regularity in income earned since weavers are paid per piece and loans from cooperatives act as back up for weavers in case of an emergence or insufficient income. Therefore, weaves earn to some degree an adequate income and that's able to sustain their family's welfare. Even though the Act is set to end in 2015, Rwandan handicraft products are to some extent recognized on the international market especially US, in some few EU countries and Japan. Nevertheless, there is a need to expand the market to earn a better pay for weavers but also to benefit a larger number of households in the country.

5.5 Macro level - Micro level impact

The Macro level can be evaluated through a formalized handicraft sector, foreign exchange earnings, trade creation and development due to a free market access that has to some extent led to employment and better standards of living due to income earned on the micro level. Furthermore, trade development and increase in handicraft exports could have to some level improved the country's balance of payment position through foreign exchange earned through exports which could have eased imports and could have an effect on the long term development of the country.

With free market access to the US market through AGOA, there has been a steady increase in handicraft exports leading to a formalized handicraft sector and generation of employment and income for the households weavers. Integrating local producers (weavers) with external markets somewhat

increased their income earnings and relatively enhanced household's standards of living yet also to a certain extent increased the country's total output or income that in part play a role in reducing poverty. Household weavers with a regular and adequate income are able to sustain their welfare; they are somewhat satisfied and reassured about their current and future financial situation and current and future provision of food and other basic necessities for their families. Furthermore, the improved standards of living are attributed to a certain extent a sustainable employment and income due to weaving and availability of a free market access.

Chapter 6: Conclusion

This chapter sums up results of the study by analysing the research findings basing on the research question and sub questions.

The study discussed the effect of AGOA on to household's welfare by relating non weavers (control group) and weavers (treated group), and comparing US and Japan market weavers to further stress the effect of the Act on to the US market weavers relative to Japan weavers.

In comparing the weavers and non-weavers' demographic characteristics, non-weavers were found to be to some degree a suitable control group for weavers even though some differences were found in their demographic characteristics making the comparison when examining the results between the two groups valid. In other words, both groups can be compared in terms of the characteristics analysed.

The study findings indicate that there is a significant difference between weavers and non-weavers regarding not only to their incomes but also other socio economic conditions. The study points out that weaving an economic activity somewhat became worthy due to the Act which offered a free market access and has had to some extent an effect on weaver's welfare through provision of a regular and more reliable income. An income that has to a certain extent led to adequate and safe living conditions of the weavers. They are able to feed better than before, send their children to school, pay for mutual health insurance etc. but the difference in household's income can also depend on personal handwork. However, because of a higher income and job security weavers are somewhat contented and confident with their present and future financial situation in comparison to non-weavers.

What's more, a regular market for peace baskets exports and other crafts in Rwanda due to the Act; US market weavers have to some extent benefited more compared to Japan market weavers with no free market access in terms of more export volumes to US market compared to Japan market. This mostly through expansion of exports, product upgrading, increased product competitiveness and capacity building because of serving a challenging market that has led to relatively a higher income for weavers which in return has somewhat had an effect on their well-being through increased earnings. There would be more benefits not only to US market weavers but also to a wider population if the market is guaranteed and enlarged not only in the US but also to other rich countries like Canada and Japan. The Craft Industry Secretariat in the Ministry of Trade and Industry confirmed that there is a need to expand the handicraft market and there is a strategy to help develop the market for the sector and this includes; developing a handicraft marketing strategy in order to improve product marketing, acquire a marketing company and also establish a permanent handicraft showroom in the capital. This is all done mainly to fulfil the Craft Secretariat plan of promoting the sector in order to promote exports for job creation and also reducing poverty in the country.

In conclusion, free market access for peace basket exports through AGOA to a certain extent has had an effect on weavers in general and more to US market weavers in particular relative to Japan market weavers. Granting a free market access has enabled weaving become a viable economic activity and has provided households with an opportunity to get engaged into new and profitable sector that has to some extent enhanced their welfare. This draws attention to benefits of preferential agreements and market access can have on households' welfare in developing countries especially in case of non-traditional export considering the heavily protected agricultural market in developed countries yet majority the world's poor are stranded in farming. What is more, agriculture sector in developing countries like Rwanda not only face difficulties in accessing market mostly in developed countries but is also restricted by limited and declining productivity of land on top of having declining returns of scale. In addition, agriculturalists and agro-labourers not only face limited access to land and other resources like income leading to greater threat of selling land as a coping mechanism¹⁴. The sale of land leads to more risky future for agricultural households as they turn out to be land poor leading to food insecurity crisis¹⁵. Hence, other economic opportunities especially in off-farm sectors as a result of free market access could generate different sources of income in order to broaden their livelihood strategies¹⁶ leading to improved and a bit more secure livelihoods particularly in rural areas.

Even though the study indicates that market access for off farm manufactured goods has a significant effect on household's welfare in Rwanda, further exploration on rural households is needed to accurately disclose the significance of the Act's effect particularly in rural areas because of difference in poverty level in the country. The paper examined only weavers in Kigali city due to limited time and financial resources. The ability to generalise the effect on all households weavers (handicraft) is restricted because different households may benefit differently depending on their level of poverty in different area of the country or even amongst different households. There is a remarkable difference in poverty levels between rural and urban areas, with rural areas at 66% than in urban areas; Kigali at 12% and other towns at 19%¹⁷.

¹⁴ http://amis.minagri.gov.rw/sites/default/files/user/Rwanda_CFSVA_Final_Feb_07.pdf

¹⁵ Ibid

¹⁶ Ibid

¹⁷ ibid

References

- Acharya, Y. (2008) "Women's education and Intra-household autonomy: Evidence from Nepal"
- Barber, T. and M. Krivoshlykova (2006) 'Global Market Assessment for Handicrafts' USAID
- Basanta K. Pradhan and Sahoo Amarendra (January 2006) 'The Impact of Trade Liberalisation on Household Welfare and Poverty in India'
- Belk, R.W. and R. Groves (1999) 'Marketing and the Multiple Meanings of Australian Aboriginal Art', *Journal of Macromarketing* 19(1): 20.
- Bhagwati, J. and A. Panagariya (1996) 'The Theory of Preferential Trade Agreements: Historical Evolution and Current Trends', *The American Economic Review* 86(2): 82-87.
- Black, T.R. (1999) *Doing Quantitative Research in the Social Sciences: An Integrated Approach to Research Design, Measurement and Statistics*. Sage Publications Ltd.
- Bouët, A. (2006) 'How Much Will Trade Liberalization Help the Poor?: Comparing Global Trade Models', Research briefs.
- Brenton, P., M. Hoppe and World Bank. International Trade Division (2006) *The African Growth and Opportunity Act, Exports, and Development in Sub-Saharan Africa*. World Bank, International Trade Dept
- Chandra, V., Y. Li and O. Rodarte (2007) 'Commodity Export Diversification in Rwanda-Many Export Discoveries with Little Scaling-Up'.
- Collier, P. and A.J. Venables (2007) 'Rethinking Trade Preferences: How Africa can diversify its Exports', *The World Economy* 30(8): 1326-1345.
- Daniel J. Plunkett (May 2008) 'Export Diversification in Rwanda: Promoting Sales of Handicrafts and Horticultural Products. Case Study on Rwanda'(Expert Meeting of LDC in preparation for the 4th United Nations Conference on Least Developed Countries).
- Dhamija, J. (1975) 'Handicrafts: A Source of Employment for Women in Developing Rural Economies', *Int'l Lab.Rev.* 112: 459
- Geithner, T. and G. Nankani (2002) 'Market Access for Developing Country exports—Selected Issues', Report prepared by the Staffs of the IMF and the World Bank.
- Gil-Pareja, S., R. Llorca-Vivero and J.A. Martínez-Serrano (2010) 'Do Nonreciprocal Preference Regimes Increase Exports From The Deveveloping World To Richer Countries?'
- Hans Peter Lankes (2002) 'Market Access for Developing Country Exports - Selected Issues', IMF
- ILO and MDG (2011) 'Towards Decent Work in Sub-Saharan Africa: Monitoring MDG Employment Indicators'.
- Jose F. Medina and Esmeralda de los Santos (2008) 'The Globalisation of Indigenous art: The case of Mata Ortiz Pottery', *Fostering Indigenous Business and Entrepreneurship in the Americas Conference FIBEA 2008*
- Kabeer, N. (1997) 'Women, Wages and Intra-household Power Relations in Urban Bangladesh', *Development and Change* 28(2): 261-302.

- Kersten, L.C.S.J.K. (2008) 'The Economic Effects of a Free Trade Agreement between the European Union and South Korea'.
- Khosa, M.M. (2001) "Empowerment through economic transformation"
- Lankes, H.P. (2002) 'Market Access for Developing Countries', *Finance and Development* 39(3): 8-15.
- Ministry of Trade and Industry - Republic of Rwanda (March 2011) 'Promotion of Handicraft - Introducing the "Handicraft Excellence Award" Program - (HEAP)'
- Ministry of Trade and Industry - Republic of Rwanda (January 2009) 'Rwanda Craft Industry Sector Strategic Plan 2009-2013'.
- Nafukho, F.M. and Codesria (2003) *Africa Growth and Opportunity Act: New Path to Africa's Economic Recovery?* Codesria
- Nicita, A. (2004) 'Who Benefited from Trade Liberalization in Mexico? Measuring the Effects on Household Welfare', *World*
- Panagariya, A. (2003) 'Aid through Trade: An Effective Option?', *International Trade*.
- Plummer G.M, Cheong David and Hamanaka S (2010) *Methodology for Impact Assessment of Free Trade Agreements*. Vol. 39. Philippines: <www.adb.org>.
- PPPMER-III (2010) 'Rwanda Craft Products Catalogue'
- Puri, L. and United Nations Conference on Trade and Development (2005) 'Towards a New Trade "Marshall Plan" for Least Developed Countries: How to Deliver on the Doha Development Promise and Help Realize the UN Millennium Development Goals? United Nations
- Republic of Rwanda (2000), "Rwanda Vision 2020" Ministry of Finance and Economic Planning
- Republic of Rwanda - National Institute of Statistics of Rwanda (May 2007) 'EICV Poverty Analysis for Rwanda's Economic Development and Poverty Reduction Strategy'
- Robertson, R. (2004) 'Relative Prices and Wage Inequality: Evidence from Mexico', *Journal of International Economics* 64(2): 387-409.
- Rwanda Development Board (2010) 'AGOA Marketing Strategy'
- Sen, S. (2010) 'International Trade Theory and Policy: A Review of the Literature', *Economics Working Paper Archive*
- Seyoum, B. (2007) 'Export Performance of Developing Countries Under the Africa Growth and Opportunity Act: Experience from US Trade with Sub-Saharan Africa', *Journal of Economic Studies* 34(6): 515-533.
- Sharer, R. (1999) 'An Engine of Growth for Africa', *Finance & Development*: 26.
- Sheehy, B. (2006) 'Un-Fair Trade as Friendly Fire: The Australia-USA Free Trade Agreement', *beppress Legal Series*: 1734
- Suranovic, S.M. (2008) *International Trade, Theory and Policy*
- Taimni, K. (1981) 'Employment Generation through Handicraft Co-Operatives: The Indian Experience', *Int'l Lab.Rev.* 120: 505
- Thirlwall, A.P. (2000) 'Trade Agreements, Trade Liberalization and Economic Growth: A Selective Survey', *African Development Review* 12(2): 129-160.
- United States Trade Representative '2008 Comprehensive Report on U.S Trade and Investment Policy towards Sub-Saharan Africa and Implementation of the African Growth and Opportunity Act'
- Varshney, S. (2011) 'Role of Women in Informal Sector', *Economic Affairs* 56(2): 177-181.

Vinck P. (December 2006) Rwanda: Comprehensive Food Security and Vulnerability Analysis. United Nations World Food Programme

World Bank (April 2011) 'Rwanda Economic Update'(Spring Edition)

Yubraj Acharya (November 2008) 'Women's Education and Intra-Household Autonomy: Evidence from Nepal'⁵.

Appendices

Questionnaire

A. Household

District: **Cooperative:**
N^o.....

1. Age

- 15-20
- 25-30
- 35-40
- 45 –50
- 55 – 60

2. Marital status

- Single
- Married
- Divorced
- Widowed

3. Education level

- Primary
- Secondary
- Tertiary

4. How big is your household?

- 2-4
- 4-6
- 6-8
- 10 and more

5. How many work and how many are dependents?

.....
.....

6. How did you get into weaving?

- Word of mouth
- Radio announcement
- Other ways

7. Is weaving:

- Seasonal job
- Temporary job

- Permanent job

8. Economic activity before weaving?

- Full time housewife
- Substance farmer
- Small scale commercial farming
- Livestock farming
- Others

9. If farming, what is the size of family plot (more than 60% of household have less than 0.7 hectares)?

- 0.1 – 0.4
- 0.4 – 0.7
- 0.7 – 1

10. Largest share of family income come from?

- Weaving
- Own farm
- Sale of assets
- Social benefits
- Other business

11. Monthly net income (estimate) from weaving?

- 10,000 – 30,000
- 40,000 – 50,000
- 60,000 and above

12. Number of hours per day spent weaving?

- 4
- 6
- 8
- 10

13. Do you have other sources of income?

- No
- Small scale commercial farming
- Livestock farming
- Small shop
- Sale of assets
- Social welfare e.g. Survivor's fund
- Others

b) Estimate the amount?

14. Family monthly expenditure (Estimates)?

- Health
- Education
- Food
- Investments e.g. Farm inputs, assets (livestock, more land etc)
- Others.....

15. How satisfied are you with your current financial situation?

- Fully satisfied
- Somewhat satisfied
- Less than satisfied
- Not at all satisfied

16. Do you feel that your financial situation since weaving;

- Improved a lot
- Improved somewhat
- Remained the same
- Deteriorated

17. Do you think that in the near future (2-3 years), your financial situation will?

- Improve a lot
- Slightly improve
- Remain the same
- Deteriorate

18. How do you consider your current level of expenditure for your food and other basic necessities like clothing and housing as?

- More than adequate
- Adequate
- Less than adequate
- Don't know

19. How concerned are you being able to provide for your family with food and basic necessities in the near future (2-3 yr)?

- Very concerned
- A little concerned
- Not too concerned
- Don't know

20. What is the current aspect of life that concerns you most?

- Money
- Job security
- Time allocation between activities
- Others

21. Do you belong to Umurenge SACCO (saving scheme)?

- Yes
- No

22. If yes, how much are you able to save per month?

- 5,000 – 10,000
- 15,000 – 20,000

23. Any other investments?

- Livestock
- More land
- Business
- Others

24. How has the income earned been able to help you improve your (intra household bargaining power) relationship with your household members e.g. Husband?

- more respectful
- Same
- Worse

25. Considering your household economic situation in comparison to others in your community;

- Feel among the well –off
- Not rich but manage well
- Neither rich nor poor
- Poor

21. Since you began weaving; has the economic situation in your household easier than before?

- Yes
- No

b) How?

22. How important is the income from weaving important in your household?

- Very

- Fairly important
- Least important
- Don't know

Local leaders/cooperative heads -Questionnaire

1. Brief description of the Interviewee
 - Position in the community and number of years in that position?
 - Describe the living conditions in the community in the comparison to other areas
 - Describe the living conditions of the weavers in the community in the comparison to other
2. Brief description of the area under study
 - Population
 - Major economic activities
 - Major issues affecting the area
3. What are some of the main changes in your community since the introduction of weaving on a large scale especially for families that weave?
 - Increase/decrease in employment (estimates)
 - Increase/ decrease in number of school going children
 - Increase/ decrease in number of households joining Umurenge SACCO, Mutual santé (CBHI)
 - Decrease/ increase in Child labor
 - Migration due to employment opportunities
 - Increase in services demanded like telephone, power, etc
 - Improved housing conditions
 - Women empowerment
 - Reduced domestic violence
 - Any others
 - Etc

**Ministry of Trade and Industry, Rwanda Development Board,
Private sector federation - Questionnaire**

1. What led to the expansion of the Peace basket and handcraft sector in the country? And when?
 - Booming tourism industry
 - Government policies
 - US Market through AGOA
 - Any other
2. What are government policies in place for the development of the handcraft sector at the moment?
3. How do you see the Rwandan handicraft sector in comparison to other countries' handicrafts on to the international market?
4. Has there been any change in the export volumes over the years?

5. How many exporting companies are in the country and where do they export to?
6. What is the total number of handcraft cooperatives? And are they organized under one organization?

Exporting Companies

1. When did you start operating / exporting?
2. How did you get into the business?
3. Where do you export?
4. Any changes in your export volumes since you began? And why?.....
5. How optimistic are you about the Peace basket market exports to your specific market?
6. How many cooperatives (artisans in total) do you work with?
7. What is your relationship with them? Buyer- supplier, joint venture or partners?
8. Any substantial changes in women weavers' welfare you are working with?
9. How do you see the Rwandan handcraft sector in comparison to other countries' handicrafts on to the international market?