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African Regional Integration: Implications for Food Security

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1 List of Abbreviations

AEC	- African Economic Community
AU	- African Union
CET	- Common External Tariff
CAADP	- Comprehensive African Agriculture Development Programme
CMAF	- Common Market for Agricultural Products
COMESA	- Common Market for Eastern and Southern Africa
EAC	- East African Community
ECOWAS	- Economic Community of West African States
IGAD	- Inter-Governmental Authority on Development
MFN	- Most Favoured Nation
REC	- Regional Economic Community
RIA	- Regional Integration Agreement
SADC	- Southern African Development Community

3 Introduction

According to the most recent estimate a total of 925 million people are undernourished in the world. This number has declined by 9.6 between 2009 and 2010 as a consequence of a recovery in economic growth. Nonetheless the number of hungry people remains higher than before the 2007/2008 food crisis and higher than it was 40 years ago. In Sub-Saharan Africa 30 percent or 239 million people are undernourished, the highest proportion of all developing regions (FAO 2010).

The recent food crisis is caused by the combination and interaction of many elements. Some even have used the concept of a 'perfect storm' to explain the global food price spike. Factors said to have contributed to the food crisis range from demand-side issues such as the increasing consumption of food by India and China and the demand surge for biofuels to supply-side factors including a decline in stocks, slowdown in agricultural productivity and weather shocks (Headey & Fan 2008). Recent research points out that in particular export restrictions by food supplying countries have accelerated the increase in food prices (Headey n.d. in press).

In this light, International institutions and national governments are increasingly paying attention to the role (African) regional trade and integration can play in mitigating the effect the food crises and fostering agricultural growth. An example that illustrates this is UNCTAD's recent Multi-year Expert Meeting on International Cooperation that was devoted to South-South and triangular cooperation for sustainable agriculture development and food security in developing countries.¹ Similarly, UNECA's annual Economic Report on Africa 2009 focused on *Developing African Agriculture Through Regional Value Chains* (UNECA, 2009) and FAO published the report *Towards an African Common Market for Agricultural Products* (FAO 2008).

This report looks at the African regional trade, regional integration agreements (RIAs) and the implications for food security. It starts by giving a literature review on the conceptual links between regional integration and food security, listing both theoretical and empirical findings – the latter with the accent on agricultural trade in Africa. In the subsequent section a brief overview is presented on RIAs in Africa and the extent of intra-regional trade in agriculture and food. The analysis focuses on eight target countries: Ethiopia, Ghana, Kenya, Mozambique, Rwanda, Tanzania, Uganda and Sudan, and the RIAs these countries have endorsed. The report continues with a summary of agricultural provisions in the RIAs followed by an analysis of the factors hampering agricultural and food trade between African countries. A distinction is made between trade barriers (mainly tariffs) and problems with infrastructure. The next section describes two Pan-African programs to promote agricultural development and food security. Finally, the report ends with a brief discussion about the implications of the findings for food security, conclusions and recommendations for follow-up research.

4 Literature Review

The links between regional trade and food security are complex and multiple. Overall, trade is regarded as an important channel for the diffusion of technology, which, in turn, will stimulate long-term growth and development (Grossman & Helpman 1995). Eventually, this will contribute to poverty reduction and food security. Such a discussion, however, is out of the scope of this paper. Here the focus is explicitly on the trade in agricultural and food commodities and its impact on food security. There are two channels through which agricultural trade results in enhanced food security.

First, indirectly by promoting economic growth, which improves income and, hence, the access to food. Empirical research has shown that agricultural growth contributes more to poverty reduction in developing countries than manufacturing and services (Cervantes-Godoy & Dewbre 2010). The main reason is that by far most of the poor (in particularly women) are active in agriculture either as farmers or through off-farm employment. In addition, agricultural expansion leads to multiplied growth in the rest of the economy because agriculture is the main source of raw materials for manufacturing and it is an important source of demand for (light) capital goods and services (transport). A rise in the income of farmers will also create an increase in demand for locally produced goods and services.

¹ Multi-year Expert Meeting on International Cooperation: South-South Cooperation and Regional Integration, Second session Geneva, 14–16 December 2009, <http://www.unctad.org/templates/Meeting.asp?intItemID=4714&m=17875&info=doc&lang=1> (12-01-11).

Second, agricultural trade has a direct effect on food security by augmenting domestic food supplies and thereby increasing the availability of food. This will push food prices down and reduce food supply variability. More details about these mechanisms is presented below.

4.1 Food Security: Definition and Strategies

Food security is multi-faceted concept and there exist various definitions of food security in the literature. Here we assume the definition as used by the FAO which captures both the entitlement to food and the need for adequate nutrition: "Food security exists when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life." (FAO 2003, p. 28).

Countries can choose between two forms of food security policy. One option is to pursue a strategy of food self-sufficiency, which requires that all food needs are fulfilled by means of domestic production. Another option is to adopt a strategy of self-reliance, which argues that availability of food is most important either produced domestically or sourced by means of international trade. Most economists would agree that self-sufficiency is not an efficient and viable food security policy as it fails to acknowledge potential gains of trade that are created by international differences in production factor endowments, technology and environmental factors such as infrastructure and climate. Furthermore, a crucial element of food security is a person's access to food, not the extent to which food commodities are produced in a country or region. Hence, food security is predominantly a poverty issue, determined by whether an individual has sufficient income to purchase food. In the light of this paper and the question how (regional) trade can contribute to food security, it is assumed governments adopt a self-reliance strategy to achieve food security.

Finally, it is important to take into account the diversity across developing countries and agricultural commodities when thinking about the links between (regional) trade and food security. Developing countries differ considerably in terms of their dependency on foreign markets for the supply of food. According to Ng and Aksoy (2008), out of the 58 low-income countries 42 are net importers of food and 16 are net exporters in 2004. Countries belonging to the former group are more vulnerable to a rise in global food prices and possible food crisis than the latter.

It is also appropriate to make the distinction between trade in agricultural and food products. Apart from food, the first group also encompasses crude materials such as rubber, wood. Apart from the indirect effects on economic growth, an expansion in the trade of these goods will not contribute to food security.² Studies that examine the impact of trade integration (see below) do not differentiate between trade in agriculture and trade in food products.

4.2 Regional Integration, Trade and Food Security

4.2.1 Theory

The literature offers two types of economic benefits for the creation of regional trade blocks: the allocation effect and the accumulation effect (Baldwin & Venables 1995; UNCTAD 2009). With respect to the allocation effect, standard economic theory argues that under assumptions of perfect competition, free trade will lead to an optimal (Pareto efficient) allocation of production factors – a situation where those that gain from trade could fully compensate those that lose from trade and still be better off – and international welfare is maximised. If free trade between two countries is distorted because of tariffs, quantitative restrictions or non-tariff measures, resources are not allocated optimally and inefficiencies arise. Accordingly, trade liberalisation in the context of regional integration will lead to the reallocation of production factors (e.g. on- and off farm labour, tractors, seeds, and fertilizer), more trade in agricultural commodities including food products, improvements in efficiency and lower food prices.

The allocation effect is accompanied by so-called scale and variety effects. The former suggests that agricultural producers in a protected market will not be able to reach optimal size. They can either be

² The WTO uses the following definitions for food and agriculture trade. Agricultural products are defined by the Standard International Trade Classification (SITC), revision 3 codes as follows: SITC 0 (food and live animals); SITC 1 (beverages and tobacco); SITC 2 (crude materials excluding food and fuel) and SITC 4 (animal/vegetable oil/fat/wax) minus divisions 27 (crude fertilizer/mineral) and 28 (metal ores/metal scrap) of which food as: SITC 0, 1, 4, and division 22 (Oil seeds and oleaginous fruits). For another classification see NG and Aksoy (2008).

too large, for example because of state support or abusive market power, or too small because of limited market size. As a consequence of increased competition, inefficient farms will be forced out of business. The variety effect states that trade expansion allows consumers to choose from a larger variety of food products and farmers from more sophisticated agricultural machinery which increases welfare and productivity, respectively.

The accumulation effect implies that economic integration and free trade will attract more agricultural investment because farmers and related industries (e.g. supermarkets, producers of farm equipment and food processing) are able to specialise by becoming part of regional value chains (see UNECA 2009). The presence of more specialised actors might also create agglomeration and network effects that lead to a reduction in production costs, foster technological spillovers and increases productivity. All of this will increase the domestic supply of food and improve food security.

Apart from arrangements on the elimination of tariffs and the harmonisation of agricultural policies, in theory RIAs might also include agreements to discipline export restraints – one of the main causes responsible for the surge in global food prices. Such agreements will prevent the drying up of intra-regional food trade in times of rising world food prices when regional suppliers are tempted to reduce food exports to put downward pressure on domestic food prices. Whether such a policy will limited food price inflation in the region depends, among others, on the balance between extra- and intra-regional food trade.

Despite these positive effects, the net gains of RIAs are not straightforward. On the one hand, the formation of a trade bloc will lead to *trade creation*. This refers to the replacement of relatively high-cost domestic production with cheaper products that are produced in another country that participates in the trade block. As a result prices in the high-cost country will drop and welfare will be increased. It is similar to the allocation effect mentioned above. On the other hand, *trade diversion* might occur, when a partner's country production replaces lower-cost imports from a country outside the free trade area as a result of the high level of protection that protects the countries inside the free trade area.³

Critics of free trade have also pointed out that trade liberalisation, in particular in the short run, is likely to impose costs on countries. The closing down of inefficient farms that are unable to compete with cheaper imports from other countries might lead to increasing unemployment, disappearance of local knowledge (for example experience on traditional farming methods) and social disturbance. Another cost to countries that reduce tariffs is the loss in fiscal income. Finally, the recent food crisis has shown that being dependent on foreign markets for essential food supplies also entails risks in case of a surge in world food prices.

From an exporting country perspective there might be issues as well. Supply side constraints might prevent family farmers and low-income households, the potential beneficiaries of trade liberalisation, from taking advantage of increased trade opportunities. Instead, it might be the large commercial farmers, who are part of an international trading network, that fulfil the additional demand created by regional integration. Only with additional support, such as research and development, extension services, access to credit, trade facilitation and investment in rural infrastructure, small scale farmers will be able to increase productivity and output to tap into other markets (World Bank 2007).

The overall effect of regional trade liberalisation in agriculture can thus be positive or negative. Some will benefit from increasing opportunities to trade and a decrease in the price of food commodities, while others lose out as a consequence of increasing competition. If those who lose out are concentrated disproportionately among food-insecure households, the overall impact of regional trade integration on food security will be negative. This net effect of regional integration can only be verified through empirical research and on a case-by-case basis.

4.2.2 Empirical findings

There exists a vast literature on the impact and economic benefits of RIAs but there are only a few studies that investigate the impact on regional agricultural trade in Africa.⁴ Most of them use some form

³ For an overview of the impact of RIAs see Rutten (2010).

⁴ Gravity models are used to analyse the *ex post* effects of RIA adoption. Another research strategy is to apply a Computable General Equilibrium (CGE) model, which simulates the function of international markets through

of gravity model estimation. This model is similar to Newton's equation of gravity and uses the income (economic masses) of trade partners and the distance between them (as a proxy for transaction costs) to explain bilateral trade flows. Typically, the estimation also includes indicators to control for the effect of common language and culture on trade.

Grant and Lambert (2005) investigate the impact of eight worldwide RIAs on the trade in agricultural commodities. They both look at total agriculture and nine individual commodities. Regrettably, no distinction is made between the various RIAs in Africa and regard the continent as one trade block. According to their estimates the trade creation and trade diversion effects for African agreements are more or less equal and therefore the net gain is minimal.

The study by Seck *et al.* (2010) looks specifically at the impact of ECOWAS, an RIA between West African countries (see below), on agricultural trade. They conclude from their estimates that ECOWAS membership has resulted in more trade (e.g. trade creation) which has not been at the expense of trade with other countries (e.g. trade diversion). This suggests that the net effect of ECOWAS is positive. However, the study does not give information of the relative magnitude of the effects which makes it difficult to judge whether the impact of the RIA is substantial or marginal.

Korinek and Melatos (2009) look at the impact of three RIAs (COMESA, AFTA and MERCOSUR) in developing countries on agricultural trade. For the purpose of this paper, the results for COMESA a regional trade bloc in Eastern and Southern Africa is of particular interest (also see below). The model results indicate that bilateral trade of COMESA countries has increased after the implementation of the RTA in 2000 but also some trade diversion away from imports outside the trade block has taken place. However in comparison to AFTA and MERCOSUR, and despite the full duty free access that is granted to member countries, trade creation within COMESA is relatively low. According to the authors, this is caused by other economic and physical barriers such as lengthy customs procedures, lack of infrastructure, low complementarity of natural endowments and small markets that characterise African countries in COMESA. They also point out that the findings might not be robust as they contrast with similar studies that analysed the impact of COMESA on total trade flows. A possible reason for this is problems with data availability and quality for African countries.

Nin-Pratt *et al.* (2008) assess the potential welfare effects of SADC, a RIA between Southern African countries, on agricultural trade. In contrary to the other studies they apply an *ex ante* partial equilibrium analysis instead of gravity model estimation. Their main finding is that regional trade liberalisation in SADC countries has a small but positive effect on welfare. The net effect between trade creation and trade diversion is only 0.75 percent of total agricultural trade. The main reason for this outcome is the already low level of tariffs on agricultural products between SADC countries and the fact that most RIA members export a similar group of products.

5 Regional Agricultural Integration in Africa⁵

Regional integration has been on the agenda of African countries for a long time. Apart from the economic rationale that integration is an important stimulus for trade, investment and economic development, also political factors contributed to regional integration in Africa. These have its roots in "the Pan-African movement of shared values, collective self-reliance in development and political independence" (UNCTAD 2009 ,p. 8). In line with this, African countries signed the Abuja Treaty on June 3, in 1991, to establish a continent wide African Economic Community (AECU). The treaty provides for the creation of an African Common Market in six stages over a 34-year period. The building blocks of the AECU are eight Regional Economic Communities (RECs) which at the regional level will start up a process of coordination and harmonization of tariff and non-tariff measures in order to create a continental customs union, and eventually an economic and monetary union.⁶

a system of demand and supply equations that are solved simultaneously. By incorporating trade liberalisation in the model, one can calculate the *ex ante* impact of implementing a RIA.

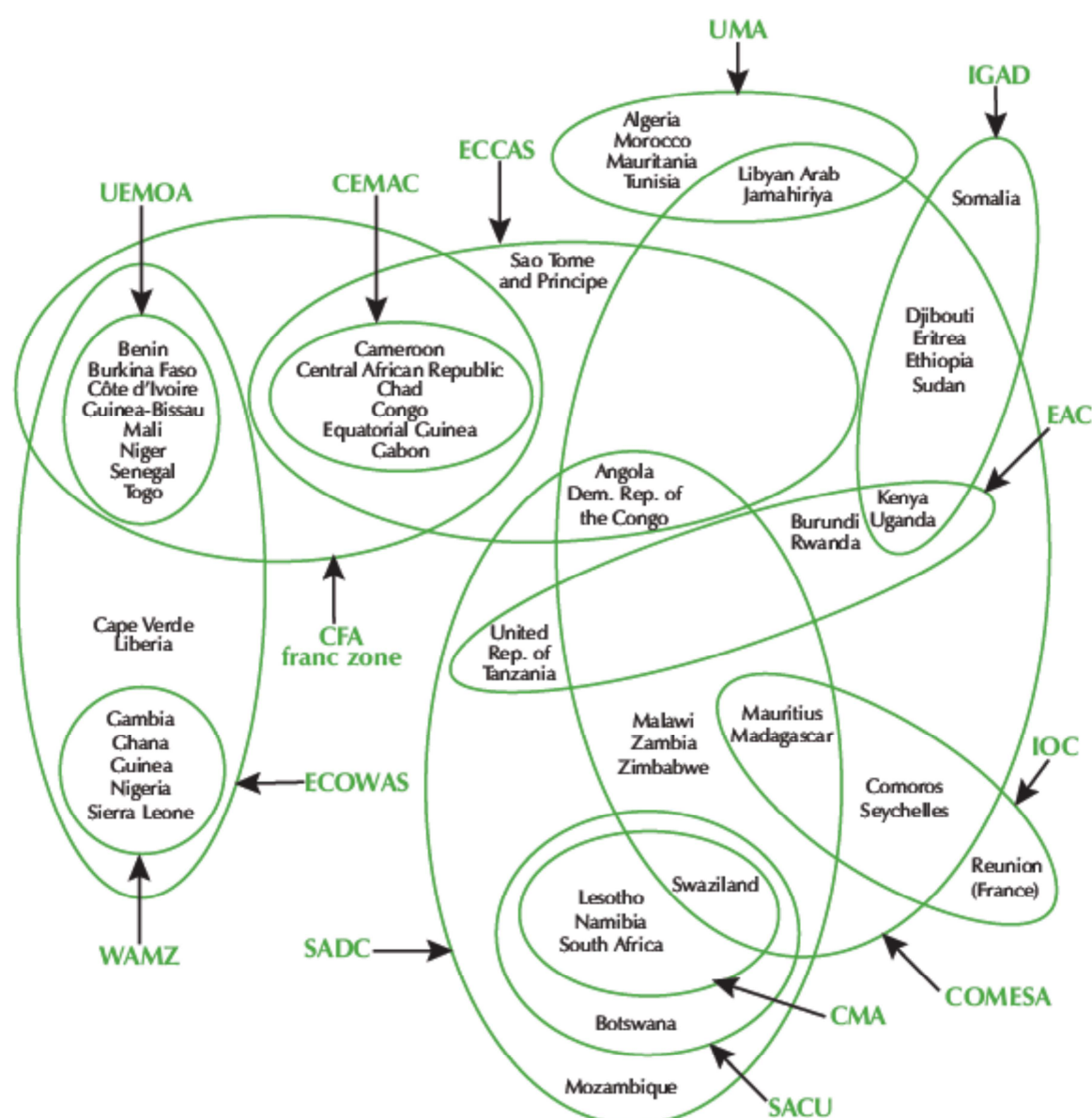
⁵ See Chapter 3 of FAO (2008) and Chapter 1 of UNCTAD (2009) for more information on regional integration in Africa.

⁶ The standard phases in the process of economic integration are the movement from preferential free trade area, free trade area, customs union (Common External Tariff, CET), common market (free movement of

As a consequence of political and economic reasons, 14 free trade areas and Customs Unions have emerged in Africa, some of which are the original RECs while others are new forms of cooperation (Table 1). Both forms of regional cooperation imply that there is a RIA between member countries to (partially) remove all tariffs and other trade barriers to promote trade. Figure 1 illustrates that many African countries are member of more than one regional integration initiative.

For the purpose of this paper the analysis is based on the following RIAs: the Common Market for Eastern and Southern Africa (COMESA), the East African Community (EAC), the Southern African Development Community (SADC), Inter-Governmental Authority on Development (IGAD) and the Economic Community of West African States (ECOWAS). Depending on data availability, special emphasis is devoted to a set of target countries that include: Ghana, Kenya, Mozambique, Rwanda, Tanzania, Uganda and Sudan (See Table 1 for corresponding regional trade blocks).

Figure 1: Overlapping membership in Regional Integration Groups



Source: UNCTAD (2009, p. 12)

capital, labour and services) and economic and monetary union (combination of customs union, common market and a single currency).

Table 1: African Free Trade Areas and Customs Unions

Major Regional Economic Communities (RECs)	Type	Areas of integration and co-operation include:	Date of entry into force	Member States	Specified objective
Arab Maghreb Union (UMA)	Free Trade Area	Goods, services, investment, migration	17 Feb. 1989	Algeria, Libyan Arab Jamahiriya, Mauritania, Morocco, Tunisia	Full economic union
Common Market for Eastern and Southern Africa (COMESA)	Free Trade Area	Goods, services, investment, migration	8 Dec. 1994	Angola, Burundi, Comoros, Democratic Republic of the Congo, Djibouti, Egypt, Eritrea, Ethiopia, Kenya, Madagascar, Malawi, Mauritius, Namibia, Rwanda, Seychelles, Sudan, Swaziland, Uganda, Zambia, Zimbabwe	Common market
Community of Sahel-Saharan States (CEN-SAD)	Free Trade Area	Goods, services, investment, migration	4 Feb. 1998	Benin, Burkina Faso, Central African Republic, Chad, Côte d'Ivoire, Djibouti, Egypt, Eritrea, Gambia, Libya, Mali, Morocco, Niger, Nigeria, Senegal, Somalia, Sudan, Togo, Tunisia	Free trade area and integration in some sectors
Economic Community of Central African States (ECCAS)	Free Trade Area	Goods, services, investment, migration	1 July 2007	Angola, Burundi, Cameroon, Central African Republic, Chad, Congo, Democratic Republic of the Congo, Equatorial Guinea, Gabon, Sao Tome and Principe, Rwanda	Full economic union
Economic Community of West African States (ECOWAS)	Free Trade Area	Goods, services, investment, migration	24 July 1993	Benin, Burkina Faso, Cape Verde, Côte d'Ivoire, Gambia, Ghana, Guinea, Guinea-Bissau, Liberia, Mali, Niger, Nigeria, Senegal, Sierra Leone, Togo	Full economic union
Inter-Governmental Authority on Development (IGAD)	Free Trade Area	Goods, services, investment, migration	25 Nov. 1996	Djibouti, Eritrea, Ethiopia, Kenya, Somalia, Sudan, Uganda	Full economic union
Southern African Development Community (SADC)	Free Trade Area	Goods, services, investment, migration	1 Sep. 2000	Angola, Botswana, Democratic Republic of the Congo, Lesotho, Malawi, Mauritius, Mozambique, Namibia, Seychelles, South Africa, Swaziland, United Republic of Tanzania, Zambia, Zimbabwe	Full economic union
Economic and Monetary Community of Central Africa (CEMAC)	Customs Union	Goods, services, investment, migration	24 June 1999	Cameroon, Central African Republic, Chad, Congo, Equatorial Guinea, Gabon	Full economic union
East African Community (EAC)	Customs Union	Goods, services, investment, migration	7 July 2000	Kenya, United Republic of Tanzania, Uganda, Rwanda, Burundi	Full economic union
Southern African Customs Union (SACU)	Customs Union	Goods, services, investment, migration	15 July 2004	Botswana, Lesotho, Namibia, South Africa, Swaziland	Custom union
West African Economic and Monetary Union (UEMOA)	Customs Union	Business law harmonized. Macroeconomic policy convergence in place	10 Jan. 1994	Benin, Burkina Faso, Côte d'Ivoire, Guinea-Bissau, Mali, Niger, Senegal, Togo	Full economic union

Source: UNCTAD (2009, p. 10)

Table 2 gives a picture of regional trade five African trade blocks as well as for Sub Saharan Africa between 1990 and 2009. It presents the share of intra-African trade as share of world trade for food, agriculture and total trade. Overall, the proportion of intra-regional trade has increased marginally in Sub Saharan Africa from 15 percent to 19 percent for agriculture and from 15 percent to 20 percent for food. A similar increase is observed in COMESA and SADC while trade within regional initiatives remained stable or slightly decreased in EAC and IGAD. Trade within ECOWAS exhibits a regressive trend for food (from 18 to 6 percent) and agriculture (from 14 to 6 percent). On the whole intra-African trade in Africa remains low also compared with other continents where intra-regional trade ranges from around 20 percent in developing America to more than 68 percent in Europe (UNCTAD 2009, p. 21).

Table 2: Intra-African trade as share of world trade in agriculture and food

		1990	1995	2000	2005	2009
COMESA	Agriculture	9	6	8	10	13
	Food	10	7	9	10	15
	Total	6	5	5	7	9
EAC	Agriculture	14	9	7	10	13
	Food	12	10	8	10	15
	Total	12	11	11	7	9
ECOWAS	Agriculture	14*	7	11	10	6
	Food	18*	6	9	10	6
	Total	12*	17	11	7	8
IGAD	Agriculture	7	6	8	9	8
	Food	6	6	7	8	9
	Total	9	8	8	6	4
SADC	Agriculture	17	16	27	26	22
	Food	16	18	30	28	24
	Total	12	10	16	16	16
SSA	Agriculture	15	14	20	21	19
	Food	15	15	21	22	20
	Total	12	12	16	19	17

*Note: WTO definitions for agriculture and food *1991. Trade equals imports plus exports.*

Source: WITS

6 Agricultural Provisions in African Free Trade Agreements⁷

This section presents a brief overview of the trade policies of the five prioritised regional initiatives with a special focus on the agricultural sector and prevailing tariff structure. It is out of the scope of this paper to give an in depth overview of the all trade measures (e.g. non-tariff measures, rules of origin and safeguard measures).⁸ As all of target countries are part of one or more free trade blocks, their agricultural trade policies have been brought in line with those of the regional initiatives they are part of. In case of structural deviations between national and regional policies additional information is provided.

Table 3 shows most favoured nation (MFN) tariff rates for a number of strategic food commodities by REC (see below more information on the selection of these commodities). It illustrates the difference in tariff protection across the RECs. With an average MFN tariff of 9.0 percent for the strategic commodities and 9.1 percent for agriculture, SADC is by far the most open trade block. With tariff of 20.9 percent EAC applies the highest tariff for strategic food products, while COMESA has the highest level of protection for total agriculture.

⁷ Unless noted otherwise, information in this section is drawn from FAO (2008).

⁸ See FAO (2008) for more information

Table 3: Average MFN applied tariffs for Strategic Commodities by African Region, 2009

Product Group	HS Code	Product Description	COMESA	EAC	ECOWAS	IGAD	SADC
Beef	0102	Live bovine animals	3.8	5.7	6.9	7.5	2.4
	0201	Meat of bovine animals, fresh or chilled	13.2	22.7	19.5	27.4	9.5
	0202	Meat of bovine animals, frozen	6.3	14.7	19.7	19.9	12.2
Poultry	0105	Live poultry	4.7	9.7	6.6	6.5	4.0
	0207	Meat and edible offal, of the poultry	11.3	19.4	20.9	21.5	8.7
Dairy products	0401	Milk and cream, not concentrated	14.0	36.8	13.8	31.0	6.9
	0402	Milk and cream, concentrated	17.9	48.3	11.0	31.8	10.5
	0403	Buttermilk, curdled milk and cream, yogurt	13.7	19.4	17.0	22.2	7.8
	0404	Whey, whether or not concentrated	7.8	23.3	15.6	20.7	6.3
	0405	Butter and other fats and oils derived from milk	11.8	16.1	17.1	19.4	10.4
	0406	Cheese and curd	13.4	22.4	19.1	23.1	11.7
Legumes	0708	Leguminous vegetables, shelled or unshelled, fresh	10.6	15.0	17.6	17.9	7.0
	071021	Peas (<i>Pisum sativum</i>)	8.6	14.3	18.1	12.6	7.9
	071022	Beans (<i>Vigna</i> spp., <i>Phaseolus</i> spp.)	10.3	12.5	17.6	16.9	8.0
	0713	Dried leguminous vegetables, shelled	9.2	16.9	16.5	17.8	8.2
Cassava	071410	Manioc (cassava)	7.1	3.6	17.1	0.0	6.8
	110814	Manioc (cassava) starch	5.1	5.0	10.5	6.7	5.3
Maize & products	1005	Maize (corn)	6.7	21.7	6.4	16.3	4.3
	110220	Maize (corn) flour	15.4	32.6	16.6	30.9	5.6
	110313	Of maize (corn)	11.7	20.3	12.0	20.5	7.1
	110423	Of maize (corn)	12.6	20.0	15.7	19.8	7.1
	110812	Maize (corn) starch	8.4	7.7	10.5	13.9	5.1
Rice	1006	Rice	4.4	0.0	9.2	2.2	4.3
	110230	Rice flour	-	-	20.0	-	-
Sorghum	1007	Grain sorghum	4.3	7.5	13.9	4.9	5.2
Groundnut	1202	Ground-nuts, not roasted	3.6	2.0	5.2	3.7	4.5
	1508	Ground-nut oil and its fractions	12.9	15.0	18.7	21.0	9.0
Oil Palm	120710	Palm nuts and kernels	-	-	10.0	-	-
	1511	Palm oil and its fractions	7.8	6.7	14.4	8.1	8.6
Sugar	17	Sugars and sugar confectionery	13.1	15.4	15.1	16.3	11.6
		Strategic commodities	11.9	20.9	15.1	19.9	9.0
		Agriculture	19.5	16.9	16.5	18.9	9.1

Note: Strategic Commodities drawn from FAO (2008). Agriculture based on WTO definition. Figures are simple (unweighted) averages.

Source: UNCTAD TRAINS in WITS

6.1 Common Market For Eastern and Southern Africa (COMESA)

COMESA is a free trade area with 19 member countries ranging from Egypt in the North to Swaziland in the South. It was founded in 1994 and is recognised under the Abuja Treaty as one of the building blocks for the creation of the AEC. By 2007, 13 member countries had joined the free trade area and are trading on a tariff free basis. The average tariff rate for agriculture is 19.5 percent.

In June 2009, with a delay of nine years, the Customs Union was launched and a CET adopted. The CET will be applied to imports from third countries subject to the MFN principle and will have a three band structure (0%, 10%, and 25%), the first category is for raw materials which also include agricultural and food commodities. It was agreed that the transition period will be three years, but can be extended to a period not exceeding five years. In 2008, the heads of COMESA, EAC and SADC agreed to create an African Free Trade Area composed of 26 joint member countries.⁹

COMESA's Aim is to adopt a common agricultural policy and strategy in the medium to long term, which objectives include among others: (1) increase agricultural productivity; (2) ensure regional food security, and; (3) increase intra and extra COMESA agricultural trade.

6.2 East African Community (EAC)

EAC is a common market comprised of five countries. After a collapse in 1977, the EAC was revived in 2000. In January 2005, the EAC CET entered into force and in 2010 launched its own common market for goods, labour and capital within the region, with the goal of a common currency by 2012 and full political federation in 2015. The CET has three band structure: raw materials (0%), intermediate products (10%) and finished goods (25%). However, the customs union is not yet fully implemented because exclusions to the CET remain. Notable exceptions for agricultural goods are rice imports from Pakistan for Kenya and wheat and barley imports for Tanzania. Also several agricultural commodities carry higher rates than the CET, including dairy goods, wheat, and sugar (WTO 2006). The average tariff on agricultural goods is 16.9 percent. Tariff-free movement of goods and services in the region has not been completely liberalised and tariffs remain in place on exports of 880 items from Kenya to Tanzania and 443 items from Kenya to Uganda, which are to be phased out by 2010.

EAC has developed an Agriculture and Rural Development Policy which main aim is to ensure food security and facilitate national agricultural production.¹⁰

6.3 Economic Community of West African States (ECOWAS)

ECOWAS is a regional group of 15 West African states.¹¹ ECOWAS was founded in 1975 but in 1993 its establishment treaty was revised to take into account the provisions of the Abuja Treaty, making the region one of the pillars of the AEC. Of the ECOWAS members, six francophone countries (plus Niger, Côte d'Ivoire and Guinea-Bissau) make up the West African Economic and Monetary Union (WAEMU), which is a customs and currency union. The WAEMU CET features four tariff categories with rates of 0% for essential social goods, 5% for essential/ basic raw materials, capital goods and specific inputs, 10% for intermediary products, and a peak tariff rate of 20% for final consumer goods. In 2006, the ECOWAS Heads of State took the decision to harmonise their import tariffs with those of the WAEMU. This failed however because Nigeria demanded an additional fifth band of 50 percent to protect certain sensitive industries.¹² The average tariff for agricultural products is 16.5 percent.

With regard to agriculture, Article 25 specifically provides that members must cooperate in the harmonisation of food security policies paying particular attention to the conclusion of agreements on food security at the regional level. In this context, the ECOWAS Heads of State adopted a common agricultural policy (ECOWAP) in 2005 in conformity with CAADP (see below), which key aim is to fight rural poverty and enhance food security by raising smallholder productivity. In the wake of the 2007/2008 food crisis which severely affected a number of West African countries (i.e. Burkina Faso, Mali and Niger), ECOWAS is currently in the process of implementing ECOWAP by developing regional and national agricultural investment plans.

6.4 Inter-Governmental Authority on Development (IGAD)¹³

The Intergovernmental Authority on Development (IGAD) in Eastern Africa was created in 1996 and currently has seven members. IGAD's mission is to increase economic cooperation and integration, promote peace and security and ensure food security in the region. With reference to intra-regional

⁹ http://en.wikipedia.org/wiki/African_Free_Trade_Zone#Africa_Free_Trade_Zone (20-01-11).

¹⁰ http://www.eac.int/agriculture/index.php?option=com_docman&task=doc_download&gid=42&Itemid=6 (20-01-11).

¹¹ Note that Niger (2009) and Côte d'Ivoire (2010) have been recently suspended from ECOWAS.

¹² ECOWAS CET: the imperatives of Nigeria's fifth band, <http://ictsd.org/i/news/10674/> (20-01-11).

¹³ Information taken from <http://igad.int/> (21-01-11).

trade the objectives are to harmonize policies with regard to trade and promote free movement of goods, services, and people within the region as well as creating and enabling environment for foreign, cross-border and domestic trade and investment. With regard to agriculture, IGAD identifies the harmonisation of agricultural policies and the initiation of food security programs as goals.

It seems that cooperation between IGAD members has almost stopped because Kenya and Uganda have shift their attention to integration within EAC, Sudan and Somalia's internal problems and the conflict between Ethiopia and Eritrea.¹⁴

6.5 The Southern African Development Community (SADC)

As an organisation SADC origins date back to 1980 but its trade policy only entered into force on 25 January 2000. Its aim is to considerably reduce tariff barriers and eliminate non-trade barriers, which culminated in the launch of a free trade area in 2008. The establishment of customs union, planned for 2010, was postponed due to the need for further studies on the impact of integration on the economies of member states.¹⁵ This might also delay the further steps towards regional integration, including the establishment of a customs union scheduled for 2010, a common market planned by 2015, and a monetary union by 2016.

The SADC treaty specifies food security, land and agriculture as areas in which member countries shall cooperate but no further information is offered with respect to agricultural trade and cooperation. Agricultural products are classified as sensitive products which means their tariffs will be eliminated between 2008 and 2012.

Five members of SADC (Botswana, Lesotho, Namibia, South Africa and Swaziland) form the Southern African Customs Union (SACU). Under SACU all members implement the import duty rates determined by South Africa. The simple average rate of SACU's applied MFN rate was 8.1% in 2009. However, with an average tariff of 10.1% agricultural products are more protected than non-agricultural products.

7 Determinants of Intra-African Agricultural Trade

The literature points out a number of factors that influence (regional) trade. Some of them can be considered as 'fixed' factors and include country characteristics like adjacency, common currency, common language and common history. An example in which the latter three are likely to play a role is trade within ECOWAS, which can be divided in an Anglophone and Francophone group, each with its own language, currency (only the Francophone block) and colonial history. Common or diverse consumer preferences also influence trade. This seems particularly relevant for the trade in food commodities as the main staple crops, such as cassava, sorghum, millet and local varieties of maize, which make up a large share of households' diet, differ across Africa. Political factors such as the loss of national sovereignty, lack of political will, lack of broad support from the private sector and civil society and perceived inequities in sharing of costs and benefits might also block regional trade integration.

Dynamic determinants of trade that are amendable to policy intervention are economic size measured by GDP, population or income per capita to proxy for demand. Most empirical studies find that demand positively affects trade. Taking into account that the majority of African countries, perhaps with the exception of South Africa and Nigeria, are characterised by low levels of income both aggregate and per capita, it is evident that demand is a constraint to intra-African trade. Similar production structures, and hence, the limited opportunities to exploit comparative advantage, might potentially hamper intra-African trade. On the other hand, differences in production costs, natural resource endowments and existing patterns of local cross-border trade in agricultural products, indicates that this might not be an important constraint (UNCTAD 2009).

High trade costs, defined as all costs that associated with getting a final product to a final consumer, are a major factor hampering intra-African trade. They can be divided into trade barriers (tariffs and non-tariff) and costs caused by problems of infrastructure.

¹⁴ <http://en.wikipedia.org/wiki/IGAD> (21-01-11).

¹⁵ <http://allafrica.com/stories/201008180923.html> (21-01-11).

7.1 Trade barriers

Table 4 presents figures on the average effective applied tariff for strategic commodities by target country and relevant regional initiatives. It also includes the average rate that is applied to imports from all countries (world). Similar information at the detailed product level for each country is given in the Annex. The difference between the MFN tariffs in Table 3 and the effective applied rates shown below is that the former are applied to all WTO members, while the latter include preferential rates that are applied to countries that participate in the same regional trade agreement as the target country. MFN rates are normally higher or the same than effective applied tariff rates (UNESCAP 2010).

As would be expected, the table indicates that tariff rates for intra-regional trade are substantially lower than tariffs applied to world imports. In particular Kenya, South Africa, Sudan and Uganda have considerably reduced, or even completely eliminated, tariffs with partner countries. Ghana and Mozambique also have trimmed down regional tariffs but the difference with world tariffs is less pronounced. With 12.4 percent, the average tariff protection for regional trade remains relatively high in Ghana. This is mainly the result of high tariffs on dairy products, maize, rice and oil palm (Table 6). For Tanzania the difference in average tariff rate for EAC and SADC is striking. The country has fully liberalised the trade with EAC members but maintained high (MFN) tariffs on virtually all (strategic) food products with SADC countries. Tariffs on milk and cream and maize flour are particularly high.¹⁶ Finally, despite its membership of COMESA and IGAD, Ethiopia does not seem to have reduced tariffs on strategic commodities for trade with partner countries. Except for beef, maize and sorghum which carry below ten percent tariffs, protection remains high for world and intra-regional trade.¹⁷

Table 6-14 also present the average regional and world tariffs on agriculture, which are similar to the rates applied to strategic food commodities. Thus, overall, the data demonstrate that, with the exception of Ethiopia and to a lesser extent Ghana and Tanzania, the target countries have significantly opened up agricultural and food markets to countries that are member of the same regional group. This means that high tariff barriers should not be a problem for regional trade and integration. Of course, non-trade barriers such as quotas, sanitary and phytosanitary measures and licence agreements, might still hamper regional agricultural and food trade in Africa. These have not been analysed in this paper.

Table 4: Average Effective Applied Tariffs for Strategic Commodities by Target Country and regional initiative, 2009.

	World	COMESA	EAC	ECOWAS	IGAD	SADC
Ghana	17.8	-	-	12.3	-	-
Kenya	21.3	0.4	0.0	-	0.5	-
Mozambique	10.7	-	-	-	-	5.9
Rwanda	12.7	1.4	0.0	-	-	-
South Africa	8.2	-	-	-	-	0.0
Sudan	16.8	0.8	-	-	-	4.3
Tanzania	23.4	-	0.0			29.2
Uganda	23.3	3.9	-	-	0.8	-
Ethiopia	22.0	20.6	-	-	20.4	-

Note: Strategic Commodities from FAO (2008). Figures are Simple (unweighted) averages.

Source: Annex Table 6-14

7.2 Infrastructure

According to UNCTAD "transport costs are arguably the most important impediments to intra-African trade" (UNCTAD 2009, p. 37). There are problems with both 'hard' and 'soft' infrastructure. Hard infrastructure refers to physical infrastructure such as roads, railway and rivers, which are often of very

¹⁶ Note that the average effective applied tariff for world imports is the average of both (MFN) tariffs and preferential trade tariffs agreed between countries within a trade block. In the case of Tanzania, the average world tariff is lower than the average SADC tariff because of the former also includes the zero tariffs applied in EAC and possible other preferential tariffs with other countries.

¹⁷ Table 6-14 indicate missing or non-existent tariff data for trade with COMESA and SADC for a large number of products which might create a bias.

poor quality in African countries. It is estimated an investment of \$32 billion to upgrade the main intra-African road network would result in trade expansion of about \$250 billion over a period of 15 years.

Soft infrastructure is the sum of the policy and regulatory environment, the transparency and predictability of trade and the general quality of business environment. In comparison with other regions, time and costs to trade are much higher in Africa (Table 5), severely hampering intra-African trade. Apart from inefficiencies caused by weak institutions (e.g. insufficient opening times, lengthy procedures and paperwork, and breakdown of electronic systems), corruption also contributes to problems at the border.

Finally, a considerable difficulty for intra-regional trade is the high number of landlocked countries in Africa. Such countries are dependent on the infrastructure of neighbouring countries for the transport of goods to other African countries or markets. Hence, they are particularly affected by the poor state of the road, river and rail network and inefficient border procedures that characterise many African countries. Deficiencies in infrastructure will also have a negative impact on agriculture and food trade in Africa.

Table 5: Export and Import Procedures, Time and Cost for Selected Regions, 2009.

	Number of documents needed for export	Time for export (days)	Cost to export (\$ per container)	Documents for import (number)	Time for import (days)	Cost to import (\$ per container)
Organization for Economic Cooperation and Development	4.5	10.7	1 069.1	5.1	11.4	1 132.7
East Asia and Pacific	6.7	23.3	902.3	7.1	24.5	948.5
Latin America and Caribbean	6.9	19.7	1 229.8	7.4	22.3	1 384.3
Eastern Europe and Central Asia	7.1	29.7	1 649.1	8.3	31.7	1 822.2
Middle East and North Africa	6.5	23.3	1 024.4	7.6	26.7	1 204.8
Sub-Saharan Africa	7.8	34.7	1 878.8	8.8	41.1	2 278.7
Source: World Bank, 2009.						
Note: This information measures procedural requirements for exporting and importing standardized cargo of goods by ocean transport, from the contractual agreement between the two parties to the delivery of goods, along with the time and cost necessary for completion. All documents required for clearance of the goods across the border are also recorded. For exporting goods, procedures range from packing the goods at the factory to their departure from the port of exit. For importing goods, procedures range from the vessel's arrival at the port of entry to the cargo's delivery at the factory warehouse. For more details, consult: http://www.doingbusiness.org/MethodologySurveys/TradingAcrossBorders.aspx .						

Source: UNCTAD (2009, p. 38)

8 Pan-African Initiatives to Promote Agriculture and Food Security

There is consensus among African countries that regional integration and intra-regional trade liberalisation will have a positive influence on economic development of the continent. This is underscored by the commitment of African countries to form a regional economic and monetary union, enshrined in the Abuja Treaty. The treaty contains a number of provisions that deal with trade in agriculture. In particular Article 4 highlights the importance of creating an African market for agriculture and argues that: "among the steps to be taken to attain the objectives of the Community are the harmonisation of national policies in the field of agriculture and the establishment of appropriate organs for trade in agricultural products" (FAO 2008, p. 25).

So far progress towards opening up (agricultural) trade at the continental level has been modest but progress has been made at the level of RECs as has been described above. In view of the poor performance of the African agricultural sector and the continuous food crises that have plagued the continent, the African Union has also commenced with several Pan-African initiatives and programs that are specifically designed to promote agricultural development and overcome food insecurity. The two most important are summarised below.

8.1 African Union Common Market for Agricultural Products (CMAP)

In 2001, African Heads of State decided that the creation of an African common market for agricultural products (CMAP) could be an important catalyst in addressing food security on the continent. 'Common market' is somewhat misleading in this case because it refers to the ultimate goal of creating an African Economic Community. In fact, the proposed CMAP implies the creation of a free trade area for agricultural products across the continent. The formation of CMAP was mainly spurred by the recognition that African food and agricultural markets are very fragmented along regional, national and even within country levels, resulting in a failure to exploit economies of scale and a lack of investment in regional value chains. As a consequence, Africa has become increasingly dependent on imports from outside the continent. It is expected that by eliminating internal barriers to trade and harmonising (not increase) external protection, agricultural trade, economic efficiency, investment and growth are stimulated.

As a practical solution to implementation of CMAP, a number of key strategic commodities were identified during the 2006 AU/NEPAD Summit on Food Security in Africa. RECs and member countries were called to: *"promote and protect rice, legumes, maize, cotton, oil palm, beef, dairy, poultry and fisheries products as strategic commodities at the continental level, and cassava, sorghum and millet at subregional level, without prejudice to focused attention being given also to products of particular national importance"* (FAO 2008, p. 7).

Furthermore they were urged to accelerate the development of the strategic commodities by: *"fast tracking the implementation of trade arrangements adopted in the Regional Economic Communities (RECs) through lowering tariff barriers and elimination of non-tariff barriers both technical and non-technical by 2010, and take account of these measures during global negotiations in the Doha Round and Economic Partnership Agreement (EPA)"* (FAO 2008, p. 7).

The strategic commodities were selected on the basis of three criteria:

- Represent an important weight in the African food basket;
- Weigh significantly in the trade balance in the region through their contribution to foreign exchange earnings or are imported in large quantities to make up the gap between Africa's production as being key to fulfil Africa's food demand; and
- Have considerable unexploited production potential in Africa, owing mainly to internal supply-side constraints as well as external impediments such as agricultural subsidies and support measures used by Africa's trading partners.

Recently FAO was requested to provide technical assistance to the AU, the RECs and member states to push the establishment of CMAP forward. Recommendations are offered in FAO (2008).

8.2 The Comprehensive African Agriculture Development Programme (CAADP)

In 2003, the African Heads of State launched the Comprehensive Africa Agriculture Development Programme or CAADP, which is part of the African Union's New Partnership for Africa's Development (NEPAD). The program was a reaction by African governments to reverse the 'crisis' situation of the agricultural sector on the continent, characterised by a high rate of food imports, vulnerability to climate shocks and marginalised smallholder farmers. The main objective of CAADP is to stimulate growth through agricultural-led development that will lead to halving hunger and poverty by 2015 (MDG 1) and fighting poverty in Africa. In order to achieve these objectives, African countries pledged to spend at least 10 percent of the national budget on agriculture before 2008 (later shifted to 2015 due to the lack of progress). CAADP is not a detailed roadmap to promote growth of the agricultural sector and economic development at the country level. Instead it must be regarded as a set of key principles and targets that provide a framework for the RECs and its members to stimulate and guide the development

of national investment agricultural investment plans adapted to local conditions. It has identified four pillars for transforming agriculture:

- Pillar 1: Extend the area under sustainable land management and reliable water control systems.
- Pillar 2: Improve rural infrastructure and trade related capacities for market access;
- Pillar 3: Increase food supply chains, reduce hunger and improve response emergencies;
- Pillar 4: Improve agricultural research technology dissemination and adoption;

To implement CAADP, each REC is expected to produce regional and national agreements (Compacts) that summarise key policies, strategies and responsibilities to promote agricultural growth, followed by detailed regional and national agricultural investment plans. In line with the CAADP principles to foster ownership, alliance building and partnership, the objective is to develop Compact and investment plans in an open and participatory manner, involving all relevant stakeholders including: civil society, (small scale) farmer associations and the private sector, alongside policy makers from the Ministry of Agriculture, Trade and Finance and the development partners (i.e. World Bank and bilateral donors).

Following the 2007/2008 food crisis, the implementation of CAADP has rapidly accelerated. Many international and international institutions have pledged their support and begun committing resources to the program. To date 22 African countries have signed the Compact document and 18 of them are in the process of drafting or reviewing the agricultural investment plans.¹⁸

9 Implications for Food Security

The analysis in previous sections demonstrates that regional integration of agricultural and food markets in Africa has, at best, been partial. What does this mean for regional food security? Most of the empirical research find that (net)trade creation as a consequence of signing an African RIA is limited. This implies that the regional integration has not led to substantial allocation effects and the expected decrease in food prices caused by efficiency gains. Hence, the direct effect of African RIAs on food security seems to have been small. On the basis of the available information, it is impossible to determine whether RIAs have caused accumulation effects. Because of its more dynamic nature, accumulation effects can have a potentially much larger and positive effect on improving food security by stimulating agricultural development and poverty reduction. Taking into account that allocation effects have been small, it seems likely accumulation effects have also been limited.

This does not mean that more and better regional integration does not offer important opportunities to improve food security in Africa. Intra-regional agriculture and food trade in Africa is relatively low in comparison with other developing regions. This means there is sufficient scope for expansion. It appears that not high tariff barriers but the poor condition of soft and hard infrastructure in Africa forms the main bottleneck for regional integration. Hence, for regional trade to contribute to greater food security there is a need for African countries to invest in the upgrading of regional (rural) road networks and address deficiencies in custom procedures.

In this regard, the AU led CAADP program is a step in the right direction. The main objective of Pillar 2 is to improve rural infrastructure and market access both at the national and regional level. Another important component of CAADP is Pillar 4 that aims to boost agricultural research and development, and extension services to spread new technologies among small scale farmers. The empirical research also pointed out that the gains of regional trade in Africa are limited because of similarities in resource endowments and tradable agricultural commodities. It is expected that the diffusion of new technologies will lead to higher productivity, creating new opportunities for regional trade. Finally, the plan to create African CMAP offers prospects to enhance food security by increasing the size of markets and reap economies of scale. There is a task for the AU to play a more active role in the realisation of a CMAP as progress has been limited since the idea emerged in 2001.

¹⁸ See the website of ReSAKSS for an overview of the process: <http://www.resakss.org/> (18-01-11)

10 Conclusions and Further Research

The objective of this study was to shed light on the linkages between regional integration and food security in Africa. For this purpose, an overview is presented on the present state of African regional integration and the determinants of regional trade in agriculture and food commodities. In particular the study focuses on eight target countries, related RIAs and a set of strategic food commodities.

More and better regional integration can improve food security in Africa. Increasing trade in agriculture and food products as well as closer cooperation between African countries to facilitate regional value chains have the potential to decrease the price and availability of food and stimulate agricultural development. Both will result in the alleviation of hunger and food insecurity.

Regional integration has been on the agenda of African countries for a long time. This is clearly evidenced by the signing of the Abuja Treaty in 1991 to establish an African common market – the African Economic Community. The evidence presented in this study shows that African countries have made progress in opening up agriculture and food trade with member countries in the context of RIAs. With the exception of Ghana, Tanzania and Mozambique, the effective applied tariff rates for regional trade partners are substantially lower than the (MFN) rates applied to world trade partners. Furthermore, as part of some RIAs, African countries have agreed to develop regional food and agricultural policies to stimulate regional agricultural growth. Also a positive step towards Pan-African integration is the recent agreement between COMESA, EAC and SADC to create an African Free Trade Area.

Nonetheless, regional trade in agriculture and food only increased marginally between 1990 and 2009, and is relatively low in comparison with other developing regions. The weak state of soft and hard infrastructure, rather than high trade tariffs, seem to be the cause of this. The relatively low figures show that there are still opportunities to deepen integration and expand trade in food and agriculture. This will have positive implications for food security on the continent. To achieve this, both the African Union and regional bodies need to play an important role. The implementation of CAADP and the plan for the creation of an African common market for agricultural products are important Pan-African initiatives that will enhance food security and promote agricultural development in the long run if they are implemented well.

Some suggestions for future research are:

- Detailed country and/or regional case studies. This study has sketched a broad picture of RIAs in Africa and the links with food security. It would be useful to undertake more in-depth studies to reveal country and regional specific factors that prevent or foster regional trade in agriculture and food (e.g. non-trade barriers, the existence of local (informal) food markets, food products that are particular to the region such as sorghum and cassava).
- Analysis of the impact of CAADP on regional trade and food security. CAADP is the core program of the African Union to stimulate agricultural growth. It would be interesting to see if it already generated impact and if the Netherlands can play a role in its implementation.
- Analysis of the impact of the food crisis on regional integration and food policies. Recent research points out that many African countries reacted to the rise in food prices by various policy actions, including tariff reductions, export bans, production support and cash transfers (Abbott & de Battisti 2009). Some of these policies run counter to the process of regional integration. A possible research project could be to examine how these policy reactions affected regional integration and what would be appropriate regional (trade) policies to mitigate the impact a rise in world food prices.
- Review of empirical research on the effects of RIAs on agriculture and food trade plus possible new estimations for Africa. This study found only a handful of studies that have analysed the impact of signing a RIA on the trade in agriculture and food commodities in Africa. It would be interesting to do an extensive literature survey, review similar articles for other continents and provide new up to date estimations. Another possibility is to simulate the impact of RIAs, for example the implementation of an African common market for agricultural products, by means of CGE models.

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Annex A: Strategic Commodities

Product Group	HS Code	Product Description
Beef	102	Live bovine animals
	201	Meat of bovine animals, fresh or chilled
	202	Meat of bovine animals, frozen
Poultry	105	Live poultry
	207	Meat and edible offal, of the poultry
Dairy products	401	Milk and cream, not concentrated
	402	Milk and cream, concentrated
	403	Buttermilk, curdled milk and cream, yogurt
	404	Whey, whether or not concentrated
	405	Butter and other fats and oils derived from milk
	406	Cheese and curd
Legumes	708	Leguminous vegetables, shelled or unshelled, fresh
	71021	Peas (<i>Pisum sativum</i>)
	71022	Beans (<i>Vigna</i> spp., <i>Phaseolus</i> spp.)
	713	Dried leguminous vegetables, shelled
Cassava	71410	Manioc (cassava)
	110814	Manioc (cassava) starch
Maize & products	1005	Maize (corn)
	110220	Maize (corn) flour
	110313	Of maize (corn)
	110423	Of maize (corn)
	110812	Maize (corn) starch
Rice	1006	Rice
	110230	Rice flour
Sorghum	1007	Grain sorghum
Groundnut	1202	Ground-nuts, not roasted
	1508	Ground-nut oil and its fractions
Oil Palm	120710	Palm nuts and kernels
	1511	Palm oil and its fractions
Sugar	17	Sugars and sugar confectionery

Source: FAO (2008)

Annex B: Tariff data for Target Countries

Table 6: Effective Applied Tariffs Ghana, 2009

Product Group	HS Code	Product Description	World	ECOWAS
Beef	102	Live bovine animals	0.0	0.0
	201	Meat of bovine animals, fresh or chilled	20.0	-
	202	Meat of bovine animals, frozen	19.5	0.0
Poultry	105	Live poultry	0.0	-
	207	Meat and edible offal, of the poultry	19.4	0.0
Dairy products	401	Milk and cream, not concentrated	20.0	-
	402	Milk and cream, concentrated	20.0	20.0
	403	Buttermilk, curdled milk and cream, yogurt	20.0	20.0
	404	Whey, whether or not concentrated	20.0	-
	405	Butter and other fats and oils derived from milk	20.0	-
	406	Cheese and curd	20.0	20.0
Legumes	708	Leguminous vegetables, shelled or unshelled, fresh	18.7	0.0
	71021	Peas (<i>Pisum sativum</i>)	20.0	-
	71022	Beans (<i>Vigna</i> spp., <i>Phaseolus</i> spp.)	20.0	-
	713	Dried leguminous vegetables, shelled	19.0	0.0
Cassava	110814	Manioc (cassava) starch	10.0	
Maize & products	1005	Maize (corn)	14.3	0.0
	110220	Maize (corn) flour	20.0	-
	110313	Of maize (corn)	20.0	-
	110423	Of maize (corn)	20.0	20.0
	110812	Maize (corn) starch	10.0	-
Rice	1006	Rice	16.6	0.0
	110230	Rice flour	20.0	20.0
Sorghum	1007	Grain sorghum	20.0	-
Groundnut	1202	Ground-nuts, not roasted	10.0	10.0
	1508	Ground-nut oil and its fractions	20.0	-
Oil Palm	120710	Palm nuts and kernels	10.0	-
	1511	Palm oil and its fractions	18.8	17.5
Sugar	17	Sugars and sugar confectionery	13.9	13.3
		Strategic commodities	17.8	12.3
		Agriculture	18.1	10.4

Note: Strategic Commodities drawn from FAO (2008). Agriculture based on WTO definition. Data for some strategic commodities not presented due to lack of data or non-existent tariff line. Figures are simple (unweighted) averages.

Source: UNCTAD TRAINS in WITS.

Table 7: Effective Applied Tariffs Kenya, 2009

Product Group	HS Code	Product Description	World	COMESA	EAC	IGAD
Beef	202	Meat of bovine animals, frozen	25.0	-	-	-
Poultry	105	Live poultry	25.0	-	-	-
	207	Meat and edible offal, of the poultry	9.4	0.0	0.0	0.0
Dairy products	401	Milk and cream, not concentrated	25.0	-	-	-
	402	Milk and cream, concentrated	25.7	0.0	0.0	0.0
	403	Buttermilk, curdled milk and cream, yogurt	58.1	0.0	0.0	0.0
	404	Whey, whether or not concentrated	22.7	0.0	0.0	0.0
	405	Butter and other fats and oils derived from milk	25.0	-	-	-
	406	Cheese and curd	19.4	0.0	0.0	0.0
Legumes	708	Leguminous vegetables, shelled or unshelled, fresh	25.0	-	-	-
	71021	Peas (<i>Pisum sativum</i>)	9.4	0.0	0.0	0.0
	71022	Beans (<i>Vigna</i> spp., <i>Phaseolus</i> spp.)	0.0	-	0.0	-
	713	Dried leguminous vegetables, shelled	16.7	-	0.0	-
Cassava	71410	Manioc (cassava)	15.2	1.1	0.0	1.3
	110814	Manioc (cassava) starch	0.0	0.0	0.0	0.0
Maize & products	1005	Maize (corn)	10.0	-	-	-
	110220	Maize (corn) flour	26.7	0.0	0.0	0.0
	110313	Of maize (corn)	50.0	-	-	-
	110423	Of maize (corn)	25.0	-	-	-
	110812	Maize (corn) starch	25.0	-	-	-
Rice	1006	Rice	10.0	-	-	-
	110230	Rice flour	0.0	0.0	0.0	0.0
Groundnut	1202	Ground-nuts, not roasted	0.0	0.0	0.0	0.0
	1508	Ground-nut oil and its fractions	1.7	0.0	0.0	0.0
Oil Palm	120710	Palm nuts and kernels	25.0	-	-	-
Sugar	17	Sugars and sugar confectionery	7.5	0.0	0.0	0.0
		Total strategic commodities	15.1	0.5	0.0	0.0
		Agriculture	21.3	0.4	0.0	0.5

Note: Strategic Commodities drawn from FAO (2008). Agriculture based on WTO definition. Data for some strategic commodities not presented due to lack of data or non-existent tariff line. Figures are simple (unweighted) averages.

Source: UNCTAD TRAINS in WITS.

Table 8: Effective Applied Tariffs Mozambique, 2009

Product Group	HS Code	Product Description	World	SADC
Beef	102	Live bovine animals	3.8	
	201	Meat of bovine animals, fresh or chilled	10.0	10.0
	202	Meat of bovine animals, frozen	15.7	10.0
Poultry	105	Live poultry	2.9	
	207	Meat and edible offal, of the poultry	17.3	15.0
Dairy products	401	Milk and cream, not concentrated	12.2	7.5
	402	Milk and cream, concentrated	12.1	11.9
	403	Buttermilk, curdled milk and cream, yogurt	12.5	-
	404	Whey, whether or not concentrated	2.5	-
	405	Butter and other fats and oils derived from milk	7.1	-
	406	Cheese and curd	15.3	13.4
Legumes	708	Leguminous vegetables, shelled or unshelled, fresh	17.0	15.0
	71021	Peas (<i>Pisum sativum</i>)	10.0	-
	71022	Beans (<i>Vigna</i> spp., <i>Phaseolus</i> spp.)	10.0	-
	713	Dried leguminous vegetables, shelled	5.6	-
Maize & products	1005	Maize (corn)	0.8	-
	110220	Maize (corn) flour	18.8	15.0
	110313	Of maize (corn)	5.0	-
	110423	Of maize (corn)	3.8	-
	110812	Maize (corn) starch	3.8	-
Rice	1006	Rice	3.9	-
Groundnut	1202	Ground-nuts, not roasted	3.8	-
	1508	Ground-nut oil and its fractions	15.0	15.0
Oil Palm	120710	Palm nuts and kernels	10.7	5.9
	1511	Palm oil and its fractions	14.4	15.0
Sugar	17	Sugars and sugar confectionery	10.5	3.8
Total strategic commodities			10.7	5.9
Agriculture			9.6	2.5

Note: Strategic Commodities drawn from FAO (2008). Agriculture based on WTO definition. Data for some strategic commodities not presented due to lack of data or non-existent tariff line. Figures are simple (unweighted) averages.

Source: UNCTAD TRAINS in WITS.

Table 9: Effective Applied Tariffs Rwanda, 2009

Product Group	HS Code	Product Description	World	COMESA	EAC
Beef	102	Live bovine animals	0.0	0.0	0.0
	201	Meat of bovine animals, fresh or chilled	25.0	-	-
	202	Meat of bovine animals, frozen	8.3	0.0	0.0
Poultry	105	Live poultry	3.1	0.0	0.0
	207	Meat and edible offal, of the poultry	10.0	0.0	0.0
Dairy products	401	Milk and cream, not concentrated	15.0	0.0	0.0
	402	Milk and cream, concentrated	37.5	8.6	0.0
	403	Buttermilk, curdled milk and cream, yogurt	16.7	0.0	0.0
	404	Whey, whether or not concentrated	25.0	-	-
	405	Butter and other fats and oils derived from milk	14.3	0.0	0.0
	406	Cheese and curd	18.4	0.0	0.0
Legumes	708	Leguminous vegetables, shelled or unshelled, fresh	0.0	0.0	0.0
	71022	Beans (Vigna spp., Phaseolus spp.)	0.0	0.0	0.0
	713	Dried leguminous vegetables, shelled	9.4	0.0	0.0
Cassava	71410	Manioc (cassava)	0.0	0.0	0.0
	110814	Manioc (cassava) starch	0.0	-	0.0
Maize & products	1005	Maize (corn)	0.0	0.0	0.0
	110220	Maize (corn) flour	12.5	0.0	0.0
	110313	Of maize (corn)	0.0	-	0.0
	110812	Maize (corn) starch	0.0	0.0	0.0
Rice	1006	Rice	0.0	0.0	0.0
Sorghum	1007	Grain sorghum	0.0	0.0	0.0
Groundnut	1202	Ground-nuts, not roasted	0.0	0.0	0.0
	1508	Ground-nut oil and its fractions	12.5	-	0.0
	1511	Palm oil and its fractions	6.4	2.3	0.0
Sugar	17	Sugars and sugar confectionery	13.5	2.8	0.0
Total strategic commodities			14.7	1.7	0.0
Agriculture			12.7	1.4	0.0

Note: Strategic Commodities drawn from FAO (2008). Agriculture based on WTO definition. Data for some strategic commodities not presented due to lack of data or non-existent tariff line. Figures are simple (unweighted) averages.

Source: UNCTAD TRAINS in WITS.

Table 10: Effective Applied Tariffs South Africa, 2009

Product Group	HS Code	Product Description	World	SADC
Beef	102	Live bovine animals	0.0	-
	201	Meat of bovine animals, fresh or chilled	26.7	0.0
	202	Meat of bovine animals, frozen	36.7	0.0
Poultry	105	Live poultry	0.0	-
	207	Meat and edible offal, of the poultry	4.9	-
Dairy products	401	Milk and cream, not concentrated	0.0	0.0
	403	Buttermilk, curdled milk and cream, yogurt	0.0	0.0
Legumes	708	Leguminous vegetables, shelled or unshelled, fresh	3.0	0.0
	71021	Peas (<i>Pisum sativum</i>)	7.8	0.0
	71022	Beans (<i>Vigna</i> spp., <i>Phaseolus</i> spp.)	7.9	-
	713	Dried leguminous vegetables, shelled	7.0	0.0
Cassava	71410	Manioc (cassava)	1.9	-
	110814	Manioc (cassava) starch	4.4	-
Maize & products	1005	Maize (corn)	0.0	0.0
	110220	Maize (corn) flour	0.0	0.0
	110313	Of maize (corn)	5.0	-
	110423	Of maize (corn)	5.0	-
	110812	Maize (corn) starch	3.4	0.0
Rice	1006	Rice	0.0	0.0
Sorghum	1007	Grain sorghum	1.5	-
Groundnut	1202	Ground-nuts, not roasted	6.1	0.0
	1508	Ground-nut oil and its fractions	5.9	-
	1511	Palm oil and its fractions	7.4	0.0
Sugar	17	Sugars and sugar confectionery	12.6	0.0
Total strategic commodities			8.2	0.0
Agriculture			7.1	0.0

Note: Strategic Commodities drawn from FAO (2008). Agriculture based on WTO definition. Data for some strategic commodities not presented due to lack of data or non-existent tariff line. Figures are simple (unweighted) averages.

Source: UNCTAD TRAINS in WITS.

Table 11: Effective Applied Tariffs Sudan, 2009

Product Group	HS Code	Product Description	World	COMESA	IGAD
Beef	102	Live bovine animals	9.0	-	-
	201	Meat of bovine animals, fresh or chilled	26.0	-	-
	202	Meat of bovine animals, frozen	12.0	-	-
Poultry	105	Live poultry	1.0	-	-
	207	Meat and edible offal, of the poultry	16.7	-	-
Dairy products	401	Milk and cream, not concentrated	18.0	0.0	-
	402	Milk and cream, concentrated	26.8	2.8	7.0
	403	Buttermilk, curdled milk and cream, yogurt	23.0	0.0	-
	404	Whey, whether or not concentrated	9.0	0.0	-
	405	Butter and other fats and oils derived from milk	15.6	0.0	-
	406	Cheese and curd	16.0	2.0	-
Legumes	708	Leguminous vegetables, shelled or unshelled, fresh	20.0	0.0	-
	713	Dried leguminous vegetables, shelled	5.4	1.4	5.0
Maize & products	1005	Maize (corn)	13.6	0.0	-
	110220	Maize (corn) flour	9.0	-	-
	110313	Of maize (corn)	14.5	0.0	-
	110423	Of maize (corn)	4.5	0.0	-
	110812	Maize (corn) starch	0.0	-	-
Rice	1006	Rice	0.0	0.0	0.0
Sorghum	1007	Grain sorghum	0.0	0.0	-
Groundnut	1202	Ground-nuts, not roasted	30.0	-	-
	1508	Ground-nut oil and its fractions	26.7	0.0	-
	1511	Palm oil and its fractions	15.2	0.0	-
Sugar	17	Sugars and sugar confectionery	15.9	0.2	0.0
Total strategic commodities			16.8	0.8	4.3
Agriculture			17.6	0.7	2.4

Note: Strategic Commodities drawn from FAO (2008). Agriculture based on WTO definition. Data for some strategic commodities not presented due to lack of data or non-existent tariff line. Figures are simple (unweighted) averages.

Source: UNCTAD TRAINS in WITS.

Table 12: Effective Applied Tariffs Tanzania, 2009

Product Group	HS Code	Product Description	World	EAC	SADC
Beef	102	Live bovine animals	0.0	0.0	-
	201	Meat of bovine animals, fresh or chilled	25.0	-	25.0
	202	Meat of bovine animals, frozen	14.3	0.0	25.0
Poultry	105	Live poultry	12.5	0.0	17.9
	207	Meat and edible offal, of the poultry	16.7	0.0	25.0
Dairy products	401	Milk and cream, not concentrated	42.9	0.0	60.0
	402	Milk and cream, concentrated	48.4	0.0	60.0
	403	Buttermilk, curdled milk and cream, yogurt	17.9	0.0	25.0
	404	Whey, whether or not concentrated	25.0	-	-
	405	Butter and other fats and oils derived from milk	15.0	0.0	25.0
	406	Cheese and curd	24.0	0.0	25.0
Legumes	708	Leguminous vegetables, shelled or unshelled, fresh	25.0	-	25.0
	71021	Peas (<i>Pisum sativum</i>)	25.0	-	25.0
	71022	Beans (<i>Vigna</i> spp., <i>Phaseolus</i> spp.)	12.5	0.0	25.0
	713	Dried leguminous vegetables, shelled	22.8	0.0	25.0
	110814	Manioc (cassava) starch	10.0	-	-
Maize & products	1005	Maize (corn)	25.0	0.0	35.0
	110220	Maize (corn) flour	16.7	0.0	50.0
	110313	Of maize (corn)	18.8	0.0	25.0
	110423	Of maize (corn)	25.0	-	25.0
	110812	Maize (corn) starch	8.6	0.0	10.0
Rice	1006	Rice	0.0	0.0	-
Sorghum	1007	Grain sorghum	25.0	-	-
Groundnut	1202	Ground-nuts, not roasted	10.0	-	10.0
	1508	Ground-nut oil and its fractions	0.0	-	-
	1511	Palm oil and its fractions	7.0	0.0	-
Sugar	17	Sugars and sugar confectionery	17.7	0.0	21.9
Total strategic commodities			23.4	0.0	29.2
Agriculture			18.8	0.0	22.5

Note: Strategic Commodities drawn from FAO (2008). Agriculture based on WTO definition. Data for some strategic commodities not presented due to lack of data or non-existent tariff line. Figures are simple (unweighted) averages.

Source: UNCTAD TRAINS in WITS.

Table 13: Effective Applied Tariffs Uganda, 2009

Product Group	HS Code	Product Description	World	COMESA	IGAD
Beef	102	Live bovine animals	8.9	1.0	0.0
	201	Meat of bovine animals, fresh or chilled	25.0	-	-
	202	Meat of bovine animals, frozen	20.0	0.0	0.0
Poultry	105	Live poultry	9.0	1.9	0.0
	207	Meat and edible offal, of the poultry	22.7	0.0	0.0
Dairy products	401	Milk and cream, not concentrated	50.0	15.0	0.0
	402	Milk and cream, concentrated	49.3	8.6	0.0
	403	Buttermilk, curdled milk and cream, yogurt	19.4	0.0	0.0
	404	Whey, whether or not concentrated	20.0	0.0	0.0
	405	Butter and other fats and oils derived from milk	18.5	5.6	5.6
	406	Cheese and curd	21.6	6.9	7.5
Legumes	708	Leguminous vegetables, shelled or unshelled, fresh	20.8	0.0	0.0
	71021	Peas (<i>Pisum sativum</i>)	15.0	0.0	0.0
	71022	Beans (<i>Vigna</i> spp., <i>Phaseolus</i> spp.)	16.7	-	-
	713	Dried leguminous vegetables, shelled	20.0	0.0	0.0
Cassava	71410	Manioc (cassava)	0.0	-	-
	110814	Manioc (cassava) starch	0.0	0.0	0.0
Maize & products	1005	Maize (corn)	30.0	0.0	0.0
	110220	Maize (corn) flour	40.0	0.0	0.0
	110313	Of maize (corn)	18.8	0.0	0.0
	110423	Of maize (corn)	18.8	0.0	0.0
	110812	Maize (corn) starch	6.7	0.0	0.0
Rice	1006	Rice	0.0	0.0	0.0
Sorghum	1007	Grain sorghum	16.7	-	-
Groundnut	1202	Ground-nuts, not roasted	0.0	0.0	0.0
	1508	Ground-nut oil and its fractions	18.8	0.0	0.0
Oil Palm	120710	Palm nuts and kernels	-	-	-
	1511	Palm oil and its fractions	7.0	0.0	0.0
Sugar	17	Sugars and sugar confectionery	16.2	4.8	0.0
Total strategic commodities			23.3	3.9	0.8
Agriculture			17.0	1.9	0.3

Note: Strategic Commodities drawn from FAO (2008). Agriculture based on WTO definition. Data for some strategic commodities not presented due to lack of data or non-existent tariff line. Figures are simple (unweighted) averages.

Source: UNCTAD TRAINS in WITS.

Table 14: Effective Applied Tariffs Ethiopia, 2009

Product Group	HS Code	Product Description	World	COMESA	IGAD
Beef	102	Live bovine animals	4.8	4.5	4.5
	201	Meat of bovine animals, fresh or chilled	30.0	-	-
	202	Meat of bovine animals, frozen	30.0	-	-
Poultry	105	Live poultry	5.0	-	-
	207	Meat and edible offal, of the poultry	30.0	-	-
Dairy products	401	Milk and cream, not concentrated	29.7	27.0	-
	402	Milk and cream, concentrated	19.4	18.0	19.0
	403	Buttermilk, curdled milk and cream, yogurt	30.0	-	-
	404	Whey, whether or not concentrated	30.0	-	-
	405	Butter and other fats and oils derived from milk	30.0	-	-
	406	Cheese and curd	29.8	27.0	-
Legumes	708	Leguminous vegetables, shelled or unshelled, fresh	29.4	27.0	-
	71021	Peas (<i>Pisum sativum</i>)	30.0	-	-
	71022	Beans (<i>Vigna</i> spp., <i>Phaseolus</i> spp.)	29.3	27.0	-
	713	Dried leguminous vegetables, shelled	29.2	27.0	27.0
Maize & products	1005	Maize (corn)	4.9	4.5	4.5
	110220	Maize (corn) flour	9.9	9.0	9.0
	110313	Of maize (corn)	30.0	-	-
	110423	Of maize (corn)	30.0	-	-
	110812	Maize (corn) starch	29.7	27.0	27.0
Rice	1006	Rice	5.0	4.5	-
Sorghum	1007	Grain sorghum	4.8	4.5	4.5
Groundnut	1202	Ground-nuts, not roasted	5.0	-	-
	1508	Ground-nut oil and its fractions	25.0	-	-
	1511	Palm oil and its fractions	10.5	9.0	-
Sugar	17	Sugars and sugar confectionery	18.1	16.1	18.0
Total strategic commodities			22.0	20.6	20.4
Agriculture			24.1	20.2	19.4

Note: Strategic Commodities drawn from FAO (2008). Agriculture based on WTO definition. Data for some strategic commodities not presented due to lack of data or non-existent tariff line. Figures are simple (unweighted) averages.

Source: UNCTAD TRAINS in WITS.