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Table of contents

Table of contents	i
Acknowledgements.....	iii
Acronyms and Abbreviations.....	iv
INTRODUCTION	vi
Background of the regional PACT-EAC2 training programme	vi
Objective and rationale	vi
Structure and methodology.....	vii
MODULE 1: ISSUES ANALYSIS	1
Linkages between Climate Change, Food Security and Trade.....	3
Understanding Uganda’s Nationally Determined Contributions	5
<i>An overview of the NDC</i>	5
Positive and negative impacts of CC and trade on agro-industry and food security	6
Positive and negative impacts of agro-industry on CC, FS and trade.....	7
Agro-Industry Challenges faced by Uganda Stakeholders	9
Causes of inappropriate agro-industrial development in the EAC region	10
Gender in climate change, food security and industrial development.....	12
<i>Bibliography</i>	16
MODULE 2: INSTITUTIONAL ANALYSIS.....	18
The United Nations Framework Convention on Climate Change.....	20
World Trade Organisation	22
Food and Agriculture Organisation	25
United Nations Industrial Development Organization	27
Responsible bodies and policy making process at the EAC level.....	29
Responsible bodies for climate change policy making.....	31
Responsible bodies for food Security policy making	31
Responsible Bodies for trade policy making	32
Responsible bodies for agro-industry policy making	32
<i>Bibliography</i>	34
MODULE 3: POLICY ANALYSIS.....	35

Uganda National Policies of Interest	36
Uganda National Industrial Policy 2008	37
Uganda National Trade Policy (2007).....	42
Climate Change Policy 2015	44
Agricultural Policy 2013.....	45
EAC Climate Change Policy Framework	47
EAC Climate Change Policy	47
<i>EAC Climate Change Strategy and Master Plan.....</i>	<i>49</i>
EAC Common Market Protocol	49
EAC Agriculture and Rural Development Strategy 2005-2030.....	50
EAC Industrialization Policy and Strategy.....	51
<i>EAC Industrial Policy and agro-processing.....</i>	<i>52</i>
EAC Food Security Action Plan.....	52
Gaps in designing and implementing policies in EAC.....	53
New global sustainable development agenda and Africa Agenda 2063	55
<i>Bibliography.....</i>	<i>59</i>
MODULE 4: SIMULATION EXERCISE	62
Towards Green Industrialisation in Africa	62
Group Exercise	63

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Acronyms and Abbreviations

AAUs	Assigned Amount Units
AfSD	Agenda for Sustainable Development
AGOA	African Growth and Opportunity Act
AMS	Aggregate Measurement of Support
ARDP	Agriculture and Rural Development Policy
BTAs	Border Tax Adjustments
BT	BioTechnology
CAADP	Comprehensive Africa Agricultural Development Programme
CC-FS-T	Climate Change-Food Security-Trade
CDM	Clean Development Mechanism
CER	Certified Emission Reduction
CIF	cost insurance and freight
CET	Common External Tariffs
CO ₂	Carbon dioxide
COMESA	Common Market for Eastern and Southern Africa
COW	Committee of the Whole (COW)
CSA	Climate Smart Agriculture
CSOs	Civil Society Organizations
CTE	Committee on Trade and the Environment
EAC	East African Community
EACCCP	East African Community Climate Change Policy
EBA	Everything but Arms
ECCAS	Economic Community of Central African States
ECGLC	Economic Community of the Great Lakes Countries
EPAs	Economic Partnership Agreements
EPZ	Export Processing Zone
ERUs	Emission Reduction Units
FAFS	Framework for African Food Security
FAO	Food and Agriculture Organization
FDI	Foreign Direct Investment
FNDPC	National Forum for Development and Trade Policy
FNSP	Food and Nutrition Security Policy
FTA	Free Trade Area
GATS	General Agreement on Trade in Services
GATT	Agreement on Tariffs and Trade
GCF	The Green Climate Fund
GEF	Global Environment Facility
GEMIT	Environmental Measures and International Trade
GHGs	Green House Gases
GMOs	Genetically Modified Organisms
GoK	Government of Kenya
GSP	Generalized System of Preferences
IPCC	Intergovernmental Panel on Climate Change
IPRs	Intellectual Property Rights

ITMOs	Internationally Transferred Mitigation Outcomes
JI	Joint Implementation
L&D	Loss and Damage
LDC	Least Developed Countries
LULUCF	Land Use, Land-Use Change and Forestry
MDGs	Millennium Development Goals
MFN	Most Favoured Nation
MUB	Manufacturing Under Bond
NAPA	National Adaptation Programme of Action
NEPAD	New Africa's Partnership for Development
NTBs	Non-Tariff Barriers
NTMs	Non-Tariff Measures
PACT	Promoting Agriculture-Climate-Trade
PBR	Plant Breeders Rights
PCF	Product Carbon Footprint
PRSP	Poverty Reduction Strategy Paper
PVR	Plant varieties rights
REDD	Reducing Emission from Deforestation and Forest Degradation
S&DT	Special and Differential Treatment
SDGs	Sustainable Development Goals
SMEs	Small and Medium Enterprises
SNA	National Agricultural Strategy
TBT	Technical barriers to Trade
TFA	Trade Facilitation Agreement
trapca	Trade Policy Centre in Africa
TRIPS	Trade-Related aspects of Intellectual Property RightS
UNECA	United Nations Economic Commission for Africa
UNEP	United Nations Environmental Programme
UNFCCC	United Nations Framework Convention on Climate Change
UNIDO	United Nations Industrial Development Organization
WIM	Warsaw International Mechanism for Loss and Damage
WIPO	World Intellectual Property Organisation
WMO	World Meteorological Organisation
WTO	World Trade Organisation



INTRODUCTION



Background of the regional PACT-EAC2 training programme

Phase 2 of Promoting Agriculture-Climate-Trade linkages in the East African Community (PACT EAC2) Training Programme is a project initiated by CUTS International Geneva to be undertaken at national and/or the regional levels in the East African Community through on-demand workshops.

The objectives of the training program are to improve understanding and capacity of Ugandan policy-makers, from parliamentarians to staff of Trade & Industry Ministry and Environment Ministry on how to develop/revise and implement a more climate-aware, trade-driven and food security-enhancing National Industrial Development Policy.

Objective and rationale

The objectives are to:

- Increase the capacities of a critical mass of representatives of stakeholders (e.g., staff of relevant government ministries, private sector, farmers, CSOs, staff of regional organisations) on the linkage of climate change-food security-trade issues with agro-value-addition so that the region has the technical capacity to deal with these issues, including through appropriate policy formulation and implementation;
- Create technical understanding of interlinkages (both good and bad) between climate, food security, trade and agro-industry;
- Increase capacity of stakeholders to take advantage of the positive linkages and develop adequate policies and strategies to deal with the negative linkages;
- Contribute towards the development of new generation industrial policy frameworks in Uganda. Such green and sustainable industrial policies will be

gender, youth and climate-sensitive, taking into consideration emerging regional, continental and global development agendas such as; the EAC Industrialization Policy and Strategy, Africa Agenda 2063, the United Nations' 2030 Agenda for Sustainable Development that enshrines 17 Sustainable Development Goals and the Paris Agreement whose implementation vehicles are Nationally Determined contributions.

The program and the modules therein have been developed based on relevant material in the manuals and modules prepared under PACT EAC1, as well as the training needs assessment done in the PACT EAC2 inception meeting in Dar-es-Salaam, Tanzania in February 2016.

Additional information has been sourced from the five EAC country research studies on “Agro-industrial development policies: What nexus to climate, food security and trade?” under the PACT EAC 2 Project in 2016.

At the end of this on-demand training, it is expected that the participants will:

- Be able to comprehend the concept of agro-industrial development and link it with the challenges and opportunities posed by climate, food security and trade at both the national and regional levels;
- Be able to identify in a broader sense, agro-industrial development policies and how to implement such under the nexus of climate, food security and trade at both the national and regional levels;
- Be able to initiate, formulate, revise, or monitor current industrial, agricultural, climate change and other development policies, programmes and projects taking into account climate change, food security, and trade linkages and come up with real solutions and recommendations to concrete policy or programme issues together with different stakeholders.

Structure and methodology

This training manual consists of **four modules**:

- Module 1: Issues analysis: Understanding how agro-industrial development can be more climate-aware, trade-driven and food security-enhancing (shortened to Issues Analysis).
- Module 2: Institutional analysis: Understanding and taking advantage of relevant regional and international instruments and/or bodies dealing with agro-industry, climate, food security and trade (shortened to Institutional Analysis).
- Module 3: Policy analysis: Understanding relevant national and regional policies (shortened to Policy Analysis).

- Module 4: Simulation exercise.

The above modules are designed for delivery in a highly interactive manner, making use of case studies of existing national and EAC regional policy issues. Modules one to three will be delivered as presentations with adequate room for discussion and brief exercises, while the fourth module will be developed as a practical exercise, also involving existing regional policy issue.

This training manual is designed to facilitate the national training workshop in Uganda to structure the discussion and better focus on current industrial, agricultural, climate change and other development policies, programmes and projects in relation to trade, climate change and food security issues.



MODULE 1: ISSUES ANALYSIS



Module Objective ● ● ● ●

This module introduces participants to agro-industrial development, food security, trade and climate change. It provides concepts and definitions in this regard; and discusses the status of these critical issues in Uganda and the EAC region. The goal is to enhance understanding of participants on how agro-industrial development can be more climate-aware, trade-driven and food security-enhancing in Uganda and the EAC region.

The objectives of the module are to:

- Create and increase substantive understanding of issues related to agro-industrial development, highlighting its linkages to the CC-FS-T nexus;
- Discuss the positive and negative impacts of CC-FS-T nexus on agro-industry in Uganda and the EAC region;
- Discuss the positive and negative impacts of agro-industry on the CC-FS-T nexus in Uganda and the EAC region; and
- Determine the most important causes of inappropriate agro-industrial development in Uganda and the EAC and their linkages to the CC-FS-T nexus.

The purpose is to contribute to increased knowledge of stakeholders in the fields of agro-industrial development and the manner in which it links to the CC-FS-T interface with the key thematic issues highlighted.

Learning Outcomes ● ● ● ●

By the end of the training on module 1, participants will be expected to:

- Practically demonstrate their firm grasp of the concepts of agro-industrial development, climate change, food security and trade and their interrelationships and links, particularly the positive and negative impacts.
- Determine the challenges and opportunities of the agro-industrial sector in Uganda and EAC region.

- Contribute to devising practicable strategies to manage and cope with the existing negative challenges of CC-FS-T conditions in the context of agro-industrial development.

Module Content ● ● ● ●

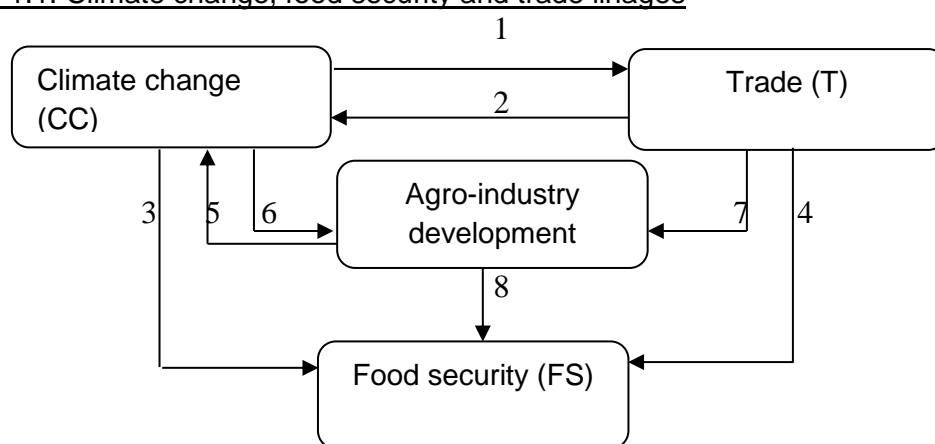
The module is organized under the highlighted key sections below:

- Linkages between CC-FS-T
- Understanding Uganda's Nationally Determined Contributions
- Positive and negative impacts of CC-FS-T on agro-industry
- Positive and negative impacts of agro-industry on CC-FS-T
- Agro-Industry Challenges faced by Uganda Stakeholders
- Most important causes of inappropriate agro-industrial development in the region and
- Gender in climate change, food security and trade.

Linkages between Climate Change, Food Security and Trade

CC-FS-T and agroindustry development linkages in the EAC region are summarized in Figure 1.1. Climate change affects trade and food security directly (1&3). Rainfall variability, increased temperatures and frequent floods, which are already being experienced in various EAC Partner State countries, has led to a reduction in the production and supply of food (including crops, livestock and fisheries). This affects food quantities traded, directly reducing food availability and therefore food security. Reduced production affects quantities available for transportation, distribution, and for agro-processing and hence climate change affects agro-industry (6).

Figure 1.1: Climate change, food security and trade linkages



Source: Authors

Increased trade implies increased transport and carbon dioxide emissions therefore contributing to climate change, while trade in environmental goods contributes to mitigation against climate effects (2). In addition, trade in environmental goods including equipment for agro-processing will directly affect agro-industry development (7).

Increased food trade (exports and imports) affects food security directly. Exports may contribute to less food availability at the domestic level while imports contribute to increased food supply at the domestic level. Increased trade (imports) may contribute to improved quality and to stability of food availability (therefore access).

Agroindustry development affects food security directly (8) in the following ways: enterprises supply seeds for agricultural production hence increasing food availability, while transportation, distribution and related service enterprises further facilitate food trade and enhance availability of food. Agro-processing reduces post-harvest losses estimated to be as high as 30% in cereals, 50% in roots and tubers, and up to 70% in fruits and vegetables (EAC, 2011; EAC 2015); it extends the shelf-life of food, making most food especially perishables more easily tradable over long distances from areas with surplus to areas with deficits; and; enhance incomes and creation of employment along the food value chain. Agro-processing produces effluents which could lead to environment pollution contributing to climate change (5).



Climate Change Effects on Food Availability in the EAC

Food Availability: Food availability may be affected through reduced production as a result of increased droughts, flooding, pests and diseases observed and projected for various EAC countries due to climate change. Climate change will also affect regional and global food trade, therefore affecting food availability in EAC countries. Trade impacts on food availability by enhancing food availability with food imports to bridge domestic shortage gaps, and it worsens food availability through increased exports from the affected country or in the case of an export ban in the source country.



Climate Change Effects on Food Accessibility in the EAC

Food Accessibility: Food accessibility depends both on market and non-market distribution mechanisms affected by climate change. Food purchasing power of households is likely to be reduced as income for farmers reduce due to low sales from reduced productions in EAC countries as a result of climate change. Reduced production and supply also imply higher food prices, which may lead to decline in affordability of food in the country. Climate change affects transport infrastructure leading to high transport costs and higher food prices.



Climate Change Effects on Food Utilization in the EAC

Food Utilization: Low household incomes (as a result of fewer sales due to reduced agricultural production) translate into the inability of households to diversify their diets, generating situations of chronic malnutrition. With increased temperatures in EAC Partner States countries and lack of proper storage facilities including refrigeration equipment in rural areas, there is likelihood of loss of food quality. Projected increase in malaria and waterborne diseases will also affect nutritional requirements and therefore utilization of food in the country.

Trading arrangements including the EAC Customs Union, among others to which EAC countries are party, which include cooperation in food technical standards, SPS and safety could improve quality of available food therefore improving food utilization.



Climate Change Effects on Food Stability in the EAC

Food Stability: Food stability will be more difficult to achieve in the EAC region as vulnerability to drought and floods may bring seasonal (as already observed in some areas), periodic and chronic food insecurity. Guaranteeing the stability of food supplies will be affected by changing patterns of crops cycles that will be impacted by climate variability particularly changes in temperatures and rainfall as observed and projected for EAC Partner State countries.

Trade can also affect stability of food supply (therefore food availability) and food prices (therefore accessibility).

Understanding Uganda's Nationally Determined Contributions

The Nationally Determined Contributions (NDCs), are national climate pledges submitted by UNFCCC Parties in the run-up to and since COP21. The NDCs spell out the actions countries intend to take to address climate change – both in terms of adaptation and mitigation. Originally submitted as Intended Nationally Determined Contributions (INDCs), these become binding NDCs when a country ratifies the Paris Agreement.

In anticipation of the Paris Agreement in 2015, countries publicly outlined what post-2020 climate actions they intended to take under the new international agreement, known as their Intended Nationally Determined Contributions (INDCs). The climate actions communicated in these INDCs largely determine whether the world achieves the long-term goals of the Paris Agreement: to hold the increase in global average temperature to well below 2°C, to pursue efforts to limit the increase to 1.5°C, and to achieve net zero emissions in the second half of this century. The INDCs are converted to NDCs once a country ratifies the Paris Agreement (<http://www.wri.org/indc-definition>, accessed 22 May 2017).

An overview of the NDC

A summary in terms of the Paris Agreement ratification (and by default the conversion from INDCs to NDCs) status from the EAC countries is presented in table 1.1.

Table 1.1: EAC Status of Paris Agreement/INDC Ratification¹

<i>Country</i>	<i>Signature</i>	<i>Ratification</i>
Burundi	22 Apr 2016	18 January 2018
Kenya	22 Apr 2016	28 Dec 2016
Rwanda	22 Apr 2016	6 Oct 2016
Uganda	22 Apr 2016	21 Sep 2016
Tanzania	22 Apr 2016	18 May 2018

Source: Author, Based on http://unfccc.int/paris_agreement/items/9444.php (Accessed 10 August 2017)

¹ As of 9 August 2017, 159 Parties of the 197 UNFCCC had ratified the Paris Agreement, effectively converting their INDCs to NDCs

Given the focus of this study, an effort was made to check if the Ugandan NDC addresses matters of industrial development. A review of the NDC shows that there is no direct reference to industrial development. However, the NDCs makes direct reference to gender-responsive climate change actions and the protection of vulnerable groups like women. The NDC further makes reference to a number of national policies including the following (which have a bearing on industry and industrial policy development):

- National Climate Change Policy (NCCP) (2015);
- Uganda Vision 2040 (2012); and
- Second National Development Plan (NDP II) 2015/16 - 2019/2020 (2015).

In the long term, the country is focusing on transitioning to climate-resilient and low-carbon development pathways that must be aligned to the green growth and broader sustainable development goals agendas. This way, the Ugandan national industrial policy should address how industrial development should look like to respond to the set goals. The NDC highlights that the electricity deficit experienced in the past decade drove the country into using unsustainable, expensive and polluting thermal generators (diesel and heavy-fuel oil). Hence, if Uganda is to contribute meaningfully towards producing affordable and modern energy as inscribed in goal seven of the United Nations Sustainable Development Goals (SDGs), then the new industrial policy must address such. For example, the construction of enabling infrastructure for the electricity sector development, including power lines, substations and transmission facilities remains essential. The manufacturing sector too has to respond to the national goal of low carbon and climate compatible development. Many technologies required for mitigation and adaptation efforts come from industrial innovation. To this end, issues pertaining to incentivising and rewarding innovation in the industry will be necessary.

Positive and negative impacts of CC and trade on agro-industry and food security

Climate change has become a global issue of concern because it poses a threat to people, ecosystems, livelihoods, and agricultural food production. The 2007 IPCC report on global climate change scenarios shows that there will be shifts in patterns of rainy seasons (IPCC, 2007). These patterns interfere with cropping systems, negatively affecting yields and food security (Otieno et al, 2013). The most vulnerable groups are the poor, especially rural farmers. Future farming and food systems will face substantial, albeit distinct, changes in their environments. Some regions (the few winners) may benefit from more favourable climate conditions for production, while others (the larger group of losers) will face increased climate-change-related biotic and abiotic stresses. From this perspective, climate change affects agricultural production, agro-processing, trade in food, food security and agro-industry development negatively.

Although climate change impacts will be felt all over the world, developing countries will likely be the most affected, particularly Africa in which the EAC is found because of its low adaptive capacity. There will be a general 3.2 degree increase in average temperatures, and humid areas will be wetter with a 7 percent increase in average precipitation (World Bank, 2009). Projections indicate an increase of arid and semi-arid lands, a reduction in crop growing times, and, in some countries, yield reductions in rain-fed agriculture of up to 50 percent by 2050, but some parts will also get wetter and will be more prone to flooding (Ibid).

In Uganda, there is evidence on the negative impacts of climate change on the national economy. There are now clear signs that the Lake Victoria region, the highlands and the semi-arid zones are affected with agriculture, water, biodiversity and energy resources all impacted (Ministry of Water and Environment, 2015). Climate change is therefore retarding the fight against poverty reduction and other related issues. From the 2015 Uganda National Climate Change Policy, it further emerges that droughts have significantly affected water resources, hydroelectricity production and agriculture. These are only, but a few of the economic sectors propelling Uganda's economy. The high frequency of droughts has persisted since 2000, with the 2004/2005 drought substantially reducing hydroelectricity generation. This power crisis undermined investment and slowed the country's economic growth. Any decrease in the water levels from Lake Victoria is reflected by decreased hydropower supplies from Nalubale and Kiira dams in the downstream.

Positive and negative impacts of agro-industry on CC, FS and trade

Industrialisation and agro-industrialisation have negative and positive effects on the climate, food security and trade. Despite their important contribution to overall economic development and agricultural development, agro-processing industries can give rise to undesirable environmental, food security and trade side effects.

The basic causal relationship between agro-industrialisation and climate change occurs through economic growth. Economic growth entails increased productive activities achieved through increased use of fossil energy sources and increased pollution leading to increases in GHG emissions into the atmosphere, which subsequently leads to adverse climatic change. Increases in agro-industrial activities are also accompanied by increased energy demands to transport products, ultimately intensifying the emissions tied to one product. In addition, as with any other industry, agro-industry can also create environmental pollution or hazards in various ways: for example, increased agricultural production most often leads to the use of fertilisers, pesticides, herbicides and fungicides the production of which requires considerable petroleum-based inputs and the discharge of organic or hazardous excess waste into water systems.

However, agro-industrialisation can also support the mitigation of climate change impacts through targeted mutually-supportive policies and strategies, for example, the conscious production of goods with low carbon footprints such as organic production. Increased economic

growth can also enable a country to access climate-friendly technology. Moreover, policies and strategies can be implemented to reuse agro-industrial wastage. Therefore, the extent to which the positive inter-linkages between agro-industries and climate change are promoted will greatly depend on the way related policies and strategies are crafted.

The agro-industrialisation, contributes to climate change in three ways. First, agro-industrialisation, which is dependent upon the raw materials produced from agricultural production, spurs increased GHG emissions by expanding agricultural production activities which make use of petroleum-based fertiliser and pesticides, whose production contributes to climate change. Secondly, industrial activities associated with agro-processing would also contribute to increased GHG emissions and further exacerbate climate change. Thirdly, through trade, agri-business and global value chains, the movement of goods across continents also leads to increased carbon footprints, which are also directly linked to global warming and climate change. Most notably, industrial-based agriculture also destroys biodiversity and the ability to capture carbon, leading to climate change.

As Maio (2013) astutely notes, industrialisation and food security are rarely mentioned together in the same document or discussion space. Maio further argues that the achievement of one of these development objectives is very likely to have positive effects on the likelihood of achieving the other (Ibid.). There is also a positive relation between food security and industrialisation which is based on the link between agricultural development and the increase in agro-processing activities. Agro-processing ensures a stable outlet for agricultural products, stimulating greater production. Therefore, agro-processing increases agricultural production, generating two positive effects. Firstly, the increase in production simply reduces the dependence on external food provision. Secondly, it creates the possibility to process additional products, allowing the generation and expansion of value-added agro-processing activities. Agro-processing will also ensure that small-scale farmers have a market for their produce, which will stimulate greater food production. Given the perishable nature of agricultural products, agro-industries are often situated close to production. A policy that supports the location of industries in rural areas promotes rural transformation and limits rural-urban migration, thus ensuring a higher and more stable labour force in rural areas. Therefore, industrialisation and food security should be viewed as complementary strategies as the achievement of one would also facilitate the achievement of the other.

However, in general, food security and industrialisation are not always complementary. Rapid industrialisation in cities may attract labour from the countryside as young people migrate to towns looking for industrial jobs, thus diminishing the productive capacity of the rural areas, ultimately contributing to food insecurity. In addition, high demand for food within cities and industrialising areas may force the redistribution of food from rural to urban and industrial areas. There have also been incidences where traders purchase agricultural land and its yield before the crop matures. Evidence has shown that when there is increased availability of lucrative markets, traders prefer to sell all the food to the market, leaving the households with very little food for their own subsistence or income. Examples of this phenomenon have occurred with maize in the northern region of Uganda, and with pineapples in the Kayunga District of Uganda. It is therefore important to understand how various geographic and socio-economic variables interact with each other and how to craft policies that create the conditions to achieve both food security and agro-industrialisation.

Industrialisation and trade are closely linked, representing two sides of the same coin (UNECA, 2015). There is a direct relationship between agro-industrialisation and trade as they facilitate each other. Trade can foster industrial development and upgrades, facilitating the exportation of the agro-processed products to foreign markets.

According to the UNECA Economic Report on Africa 2015, trade can serve as an instrument of accelerated industrialisation and structural transformation in Africa. The imperative to promote generalised industrialisation as well as agro-industrialisation in Uganda arises from the present challenge whereby Ugandan exports tend to be raw and low value-added products, leading to an ever-increasing trade deficit that grew from 8.3 percent of GDP in 2014/15 to 8.7 percent in 2015/16, as the country continues to import manufactured products.

Trade can promote trade-induced agro-industrialisation as long as it is deliberately oriented to promote agro-industrialisation. Empirical evidence shows that newly industrialised countries were able to catch-up with developed countries through highly selective trade policies. This is evident from East Asia's growing share in global exports, increasing from 2.25 percent in 1970 to 17.8 percent in 2010, coupled with the fact that manufactures constituted between two-thirds and four-fifths of the region's total merchandise exports (UNECA, 2015). Therefore, trade is a basic pre-requisite to promote agro-industrialisation, and conversely, agro-industrialisation is key to competitive trading in the regional and global arena.

Agro-Industry Challenges faced by Uganda Stakeholders

In Uganda, two cases were considered in the baselines studies: agro-processing of pineapples and initiatives in the horticulture sector.

Pineapples are mainly grown in central, southern, south-western and eastern regions of the country. It is one of the major crops produced for household consumption and for the market. Production is mainly small-scale by small-holder farmers, and often intercropped with bananas. There is growing commercialisation of pineapple cultivation, with an average acreage of five acres. The basic value addition undertaken is drying, using mainly sun drying methods. For conventional processing, farmers participate in the processing of pineapples. However, for organic processing, exporters participate in the process of drying to ensure that organic protocols are upheld. About 95 percent of sundried pineapples are exported. Domestic consumption of sun-dried pineapples has not yet become popularised, though there do exist some niche markets in Kampala. The potential exists especially among school-going children where dried pineapples can be sold as snacks. There are a number of companies that are involved in export of dried pineapples, which include Flona Commodities Ltd, Masaka Organic producers, AMFR, Bio Fresh, Bio Uganda and Fruits of the Nile.

With the assistance of the Uganda Industrial Research Institute (UIRI), companies have been supported to start juice and pulp processing, which is mainly oriented for the domestic market. Some of the companies that package juice, jam and concentrates include Jakana mixed pineapple juice, Britania, and Kyenkyo. There is also an emerging pineapple wine-making

industry, though this exists on a very small scale. Value-added products from pineapples have huge potential in both the domestic and regional markets.

The challenges identified by processors include the inconsistent supply of pineapples owing to different production methods, and competition from imported juice and concentrates. Processed horticultural products are mainly consumed in the region. It is difficult for processed horticultural products to access international export markets owing to high tariffs and NTBs, thus discouraging value addition. In addition, they also face competition from similar products from developing and developed countries with more advanced value addition technologies and famous brands. Local producers therefore face substantial challenges in order to penetrate external markets. Regional markets offer opportunities for local processors to promote their products. Other challenges include inadequate financing opportunities, high costs of utilities and inadequate capacity of the private sector to undertake processing. In 2015, Jakana Foods, one of the key industry players in the juice sub-sector, raised a red flag regarding the importation of tax free processed juice from Egypt under the COMESA Free Trade Agreement.

As for the horticulture sector, there are efforts in place by the Ugandan Government to support the sub-sector through various practical initiatives. The Government, with assistance of the Korean Government, is constructing a fruit processing plant in Soroti, which will be able to process and supply concentrates to industries in the country and export the surplus to the region. This venture has stimulated mango growing in the Eastern region. Another example is the Luwero project that focuses on tomato processing. The Government has also revamped the UIRI, which provides incubation facilities to new upcoming industries, including agro-processing. These services have also been extended to rural districts. This will enable agro-processing firms to develop competitive products.

Despite these initiatives, more actions need to be undertaken by the Ugandan Government in order to promote the horticultural sector. Actions that incorporate sustainability are especially important.

Causes of inappropriate agro-industrial development in the EAC region

There are a number of key gaps identified resulting in inappropriate agro-industrial development in the EAC. Chief among such are misaligned policy frameworks². While most policies acknowledge the importance of agro-industries, many do not clearly outline the targeted outcomes of linkages between agro-industries, trade, food security, and climate change. The results of these linkages are not pronounced by the policies and they are therefore not widely known by key stakeholders, and yet a number of opportunities and drawbacks from

² This subject is deliberated upon at length in Module 2.

these linkages are evident. There is also lack of finances and low levels of investment in agro-processing, coupled with a lack of or poor technology.

Potential spill over benefits or opportunities are not pronounced either, and efforts by the governments and other partners to tap into and build on opportunities are lacking. Efforts to mitigate potential spill over costs resulting from these linkages are also lacking, despite the growing magnitude of such costs. For example, risks and uncertainties on agricultural productivity owing to climate variability, drought, and flooding pose a serious threat in the EAC region. Unfortunately, responses in terms of strategic interventions to address these risks and uncertainties, such as scaling up irrigation schemes and agricultural financing, are lacking. Post-harvest losses are very high, especially in the horticulture sub-sector. However, the requisite strategic responses such as agro-processing and the establishment of market outlets are limited.

Climate change has made it possible in some EAC countries like Tanzania to diversify and grow tropical commodities not possible in the past. However, efforts to support and capitalize on such opportunities are absent. Overall, existing policies and regulations are silent on these relationships. They do not acknowledge the emerging benefits and costs and fail to strategize how to better utilise opportunities and mitigate the spill over costs emerging from these linkages for the benefit of the people. It is also important to underscore that while national policies and strategies are aligned with EAC regional policies, little has been translated in practice. Hence, policy implementation failure is the greatest challenge to overcome.

There also exist structural inefficiencies with respect to the functioning of value chains, specifically the way the sectors and ancillary support sectors such as packaging, labelling, branding, and marketing support agro-processing.

A number of suggestions may be put forward by the key stakeholders to address gaps resulting in inappropriate agro-industrial development in the EAC and these include the following:

- There is need for (domestic) resource mobilization to up-scale production and upgrade existing firms so as to ensure that the potential for the industry is fully utilized, especially in the banana and cassava sub-sectors;
- Provide credit for small and medium enterprises (SMEs) as well as guaranteed market access to agro-processors;
- Taking cognizance of the backward-forward linkages and ancillary sectors, such as irrigation, post-harvest handling, packaging, and waste management, it is important to create multi-stakeholder platforms which link SMEs who would provide ancillary services with agro-processing firms and other entrepreneurs;
- Monitor quality of inputs for agriculture production and outputs, including combating industrial pollution;
- Promote direct linkages between food manufacturing factories and farmers;
- Cross-cutting issues concerning the involvement of women and youth in agro-processing should be considered as a key issue of policy concern;
- Improve and expand services to farmers and processors;
- Sensitization campaign is vital for consumers to buy locally processed products; and
- Increasing irrigation, particularly in countries like Rwanda.

Gender in climate change, food security and industrial development

In “No climate justice without gender justice: an overview of the issues” (the article that triggered this paper), Terry (2009) raises the critical problem that women have been excluded from climate change policy, a glaring omission given the evidence that women suffer disproportionately in the wake of climate change-related natural disasters. Terry writes:

Poor women face many gender specific barriers that limit their ability to cope with and adapt to a changing climate; these must be removed in the interests of both gender equity and [climate change] adaptation efficiency. ... To date, gender issues have hardly featured in international policy discourse, including the United Nations Framework Convention on Climate Change and its Kyoto Protocol (Ibid: 5).

Terry’s statements prompt one to raise the question of the status of women in national climate change policy in Africa, an element that brings to fore gender mainstreaming. This is so given that natural disasters linked to climate change that affect women more such as droughts, floods and storms have been on the rise in the world including east and southern Africa. Alston (in press) defines gender mainstreaming as the “process of incorporating a gender perspective to any action, policy or legislation in order to ensure that the concerns of all are addressed and that gender inequalities are not perpetuated through institutional means”. Although gender mainstreaming focuses at gender and not strictly women, the bias towards men in society presents a default setting leading to a desire to investigate how women are addressed in gender mainstreaming. Hence, this article locks itself in revealing the status quo regarding the extent to which women needs are addressed in climate change policies from selected east and southern African countries. Since the paper draws insights from policy documents, it has limitations in that the contents of such policies are intents rather than the actual actions on the ground in terms of gender mainstreaming and how women needs are addressed. Hence, further studies to trace projects and how women are involved in implementation need to be made as this falls outside the scope of this paper.

The challenge of coming up with effective interventions focusing on reducing the vulnerability of women to climate change is evident as many climate change policies under investigation are still new. The interventions (Nhamo, 2013) include those aimed at the twin common sets of mitigation and adaptation. Mitigation, in this context, describes actions aimed at reducing the emission of dangerous greenhouse gases (GHGs) - the gases that cause the globe to warm up resulting in climate change. Adaptation, on the other hand, refers to adjustments made in order to live with climate change and the extreme weather events that result from it.

The literature (UNEP, 2011; Arora-Jonsson, 2011) presents evidence that the needs of women are undermined in climate change policy regimes and related activities. It has been well documented that women are more vulnerable during times of climate change-induced natural disasters (UNEP, 2011) and, indeed, the evidence that more women than men die during climate change calamities is conclusive. Trohanis et al (2011) identify a number of factors that affect the resilience of men and women in the event of a climate change-related disaster. The factors noted include: division of labour, visibility levels, survival skills, access to information, human development factors (such as nutrition patterns, literacy levels and health), inheritance

and/or land rights, supply of information, access to emergency aid and influence over decision-making processes.

From 4-5 April 2013, 40 representatives from government, civil society and the United Nations from the DRC, Kenya, Mozambique, Nigeria, Tanzania, South Sudan, Sudan and Uganda met in Dar es Salaam, Tanzania. The aim was to launch a dialogue on gender and the extractive industry in Africa. The dialogue set out twin objectives namely: (1) to develop a better understanding of the gender dimensions of the extractive industry and (2) to map a way forward in shaping a more gender responsive extractive industry (UN Women and Publish What You Pay, 2013). Some of the issues raised during the dialogue are presented in the information box below.



Policy pointers for improved women involvement extractive industry

- Women remain peripheral to the extractive sector, relegated to artisanal and small-scale mining which is insufficiently regulated, characterised by very harmful and difficult conditions and yields very limited economic benefit for them. The potential of women's contribution to the sector is not fully harnessed.
- It is important that women, as citizens, become central to this process, gain the capacity and access to resources, services and technologies that enable them to fairly participate and compete in the extractive business – as owners, service providers and/or employees.
- The benefit of extractive revenue for local communities, but women and youth are especially not visible. Yet the suffering caused by displacement, environmental degradation and pollution, health risks and insecurity are mostly borne by women and their children.
- There is limited data, access to information and knowledge about gender issues in the extractive sector, making it difficult to ensure gender responsive policies, legal frameworks and programmes in this sector.

Source: UN Women and Publish What You Pay (2013: 2).

In an article focusing on 'Assessing Gender Sensitivity in Uganda's Extractive Industry: A case of Hoima, Buliisa and Mubende Districts', Global Rights Alert – GRA (2017), the authors discover that both men and women do not receive adequate information on a number of issues even when they demand it. However, for women, the situation is worse given the gender roles and expectations from communities. For example, meetings on oil are organised in the morning while women are working on their gardens. This is compounded by the fact that when the men attend the meetings and access information, they hardly pass it to the women. On the other hand, it emerged that when women access information, they rarely act on it, since decision-making making is a reserve for men. In Mubende, the main extractive there is gold where artisanal miners work illegally as the law has not legalised these activities. The majority of workers there are women who work with no protective gears and face numerous human rights violations including non-payment (GRA, 2017).

The gender dimensions of food and nutrition security in the context of climate change has been looked at in Uganda (Mary Robinson Foundation, 2013). The Mary Robinson Foundation notes

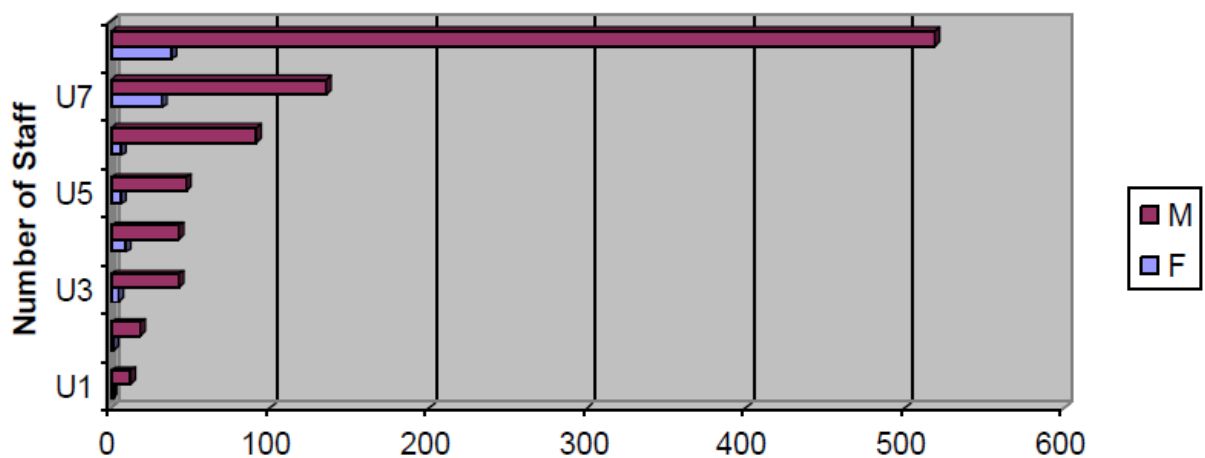
that women in Uganda are responsible for the provision of food for the family and provide most if not all the labour for food production. However, these women do not control or own the land they cultivate. Diiro (2016) adds that hunger, food insecurity, and malnutrition pose major health and economic challenges in the country and this is aggravated by the lack of access of women to productivity-enhancing inputs like credit, fertilizers and improved seeds. Given the matters raised herein, the GRA proposed that the Ugandan government must ensure that the benefits from the extractives sector are shared equally by women and men.

Uganda has put the matters of gender, particularly women and industry on the radar for long. For example, in 2006 Ministry of Works, Housing and Communications developed a 'Policy Statement for Mainstreaming Gender into the Road Sub-Sector' (MWHC, 2006). The policy covered issues including the following:

- Concept of gender mainstreaming;
- Gender relations in the road sub-sector;
- Justification for mainstreaming gender in the road sub-sector;
- Achievements, opportunities and challenges;
- Gender Policy Statement and Strategies; and
- Action plan for Implementation.

Among the constraints identified to women participation in road works was the fact that the sector was male dominated. Other factors included low education and blockages in decision-making that is regarded as a male privilege. In addition, women participating in the road sub-sector lead to stigmatisation as 'transgressors'. As a result, only 9.7% of the 1,022 filled posts then were taken up by women with the majority being in lower grades U7-U9 including support staff (cleaners, massagers and drivers). To elevate this divide and gap in skills, none of the 22 station engineers then was a woman (MWHC, 2006: 20). The gender distribution is shown in Figure 1.2.

Figure 1.2: Staff gender distribution in the roads sub-sector 2004/2005



Source: MWHC (2006: 20)

Exercise



Question 1: Discuss the climate change, food security and trade related factors that have contributed to low agro-industry development in Uganda.

Question 2: In what ways can agro-industry development affect climate change in Uganda?

Question 3: Assess Uganda's progress towards gender mainstreaming, particularly the needs of women in the extractive and other industries. You must conclude your answer by scoring this progress on a scale/score out of 10 points.

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MODULE 2: INSTITUTIONAL ANALYSIS



Module Objective ● ● ● ●

The module allows stakeholders attending the Uganda on-demand Training Workshop to familiarize themselves with international institutions and their key areas of work related to agro-industry, climate change, food security and trade. The emphasis will be on encouraging holistic, substantive, collective and pragmatic thinking by the participants that enables them to be familiar with and take advantage of relevant regional and international instruments/bodies dealing with agro-industry, climate, food security and trade.

Specifically, the module has the objective to: increase the knowledge and understanding of some key relevant regional and international institutions and/or bodies responsible of policymaking and/or policy implementation mechanisms in the area of agro-industrial development, climate change, food security and trade.

Learning Outcomes ● ● ● ●

After going through this module, it is anticipated that the participants will have been able to:

- Develop skills that permits them to know and distinguish ways on how to contribute to policy-making and/or policy implementation processes at national, regional and international levels;
- Identify practical ways of how to take better advantage of opportunities provided by regional and international organizations and/or mechanisms in place; and
- Sharpen skills to interact with institutions and contribute to policy-making at the international arena that will result in favorable outcomes in dealing with agro-industrial development as it relates to the CC-FS-T nexus.

Module Content ● ● ● ●

The module is organized under the highlighted key sections below:

- The United Nations Framework Convention on Climate Change;
- World Trade Organization;
- The United Nations Food and Agriculture Organization;
- The United Nations Industrial Development Organization; and
- Responsible bodies and policymaking process at EAC levels.

The United Nations Framework Convention on Climate Change

The United Nations Framework Convention on Climate Change (UNFCCC) of 1992 remains the key institution regarding deliberations on climate change (UNFCCC, 1992) (Figure 2.1). The UNFCCC came into force in 1994 after receiving over 170 ratification instruments from Parties.

Figure 2.1: Institutions established under the UNFCCC



Source: UNFCCC website - <http://unfccc.int/bodies/items/6241.php>

Details of the functions of all the institutions can be found at the UNFCCC website: <http://unfccc.int/bodies/items/6241.php>.

The Conference of Parties (COP) is the UNFCCC's supreme policymaking institution and has a number of subsidiary bodies and working groups that support the Convention. The COP meets annually to deliberate on climate change issues, among them: mitigation, adaptation,

financing, technology, education and awareness, and more recently, agriculture as well as loss and damage.

The COP is responsible for keeping international efforts to address climate change on track. It reviews the implementation of the Convention and examines the commitments of Parties in light of the Convention's objective, new scientific findings and experiences gained in implementing climate change policies. A key task for the COP is to review the national communications and emission inventories submitted by Parties. Based on this information, the COP assesses the effects of the measures taken by Parties and the progress made in achieving the ultimate objective of the Convention. The COP meets in Bonn, the seat of the secretariat, unless a Party offers to host the session.

The UNFCCC aims to minimise human induced GHG emissions that lead to global warming and ultimately climate change (UNFCCC, 1992). Carbon dioxide (CO₂), methane (CH₄) and nitrous oxide (N₂O) are among the chief GHGs listed in the UNFCCC. To address the escalating levels of GHGs into the atmosphere, the COPs to the UNFCCC concluded a legally binding implementation policy instrument called the Kyoto Protocol. Space is devoted in this module to deliberate on the Kyoto Protocol in detail later.

As outlined in Article 2 of the UNFCCC, the single fundamental challenge of international cooperation for climate governance is how to reconcile the objective to reduce and stabilise GHG concentration in the atmosphere with economic growth and international justice (Okereke & Schroeder, 2009). It is therefore necessary to realise that there is an extreme imbalance in both the distribution and the ability of Parties to the UNFCCC to cope with the negative impacts of the changing climate. Climate change then becomes an aspect of (in) justice as it is by the developed countries, yet it imposes severe risks to the poor who are least responsible and simultaneously most vulnerable to climate change impacts.

Two fundamental principles inbuilt within the UNFCCC that address climate justice are: (1) equity, and (2) common but differentiated responsibilities of Parties (Robinson et al., 2009). The responsibilities between the developed North and the developing South are evident as these regions have: unequal material wealth, social and economic situations, different historical contributions to GHG emissions as well as different financial and technological capacities. In many occasions during international climate policy formulation, the developing countries, especially those from Africa have viewed proposals from the developed countries with suspicion (Buck et al., 2002).

In the UN process, in theory, each country holds an equal vote (Shanahan, 2007). However, in reality, there is a big difference in the negotiating power of individual nations. Some have teams of well-trained negotiators, whereas others have individuals who may be meteorologists or technicians without training in negotiating. African negotiators are usually poorly trained and equipped unlike their counterparts from developed countries, with the exception of South Africa.

Within the UNFCCC, there are formally recognised main negotiating groups that include the Africa Group, Environmental Integrity Group, European Union (EU) + Umbrella Group, G77+China, Least Developed Countries (LDCs) and the Small Island Developing States (SIDS). Although most of their members are also part of the G77+China, the LDCs and SIDS want large developing nations such as China and India to reduce their emissions. This break from solidarity within the larger block is a new development (Shanahan, 2007). This trend has since changed as many developing countries now support climate justice as being reflected by growing calls on loss and damage.

World Trade Organisation

The WTO was formed in 1995 after the end of the cold war to regulate commerce between states. It succeeded the General Agreement on Tariffs and Trade (GATT) of 1947. Under the GATT, there was an established practice where members would meet periodically to review tariff issues. The meetings came to be known as the '*Rounds of Negotiations*' and would entail the formulation of binding principles and policies. These rounds include the Geneva Round 1947; the Annecy Round 1949; the Torquay Round 1950-51; the Geneva Round 1955-56; the Dillon Round 1961-62; the Kennedy Round 1963-67; the Tokyo Round 1973-79; the Uruguay Round³ 1984-94, which established the WTO and the Doha Round, which is yet to be concluded. The stalemate in the Doha Round has been precipitated by the contentious issues mainly concerning agricultural subsidies. A breakthrough albeit partly was struck which includes an agreement on Trade Facilitation, some agricultural issues and a few development proposals in Bali in December 2013 and later in Nairobi in 2015.

Since the establishment of the WTO, its membership has been growing. As of April 2017, there were 164 WTO members. All the EAC member states are WTO members by the means of having been GATT members. They were therefore part of the founding members of the WTO in 1995.

The WTO is established under the Marrakech Agreement. The preamble of the agreement lists the objectives of the WTO *inter alia*:

- To raise the standards of living of its members;
- To generate employment amongst its members;
- To increase trade amongst the WTO member states;
- To increase productivity amongst the WTO member states; and
- To reduce trade barriers amongst the WTO member states

The functions of the WTO include

- To oversee the implementation and administration of the WTO agreements;
- To provide a forum for negotiations; and
- To provide a Dispute Settlement Mechanism

The WTO exists both as an institution with defined structures as well as a trading system. As a trading system, it entails a complex web of agreements and codes of the GATT as well as the principles, rules and decisions of the Rounds of Negotiations. It further includes all the GATT panel decisions as well as those of the Dispute Settlement Body established under the

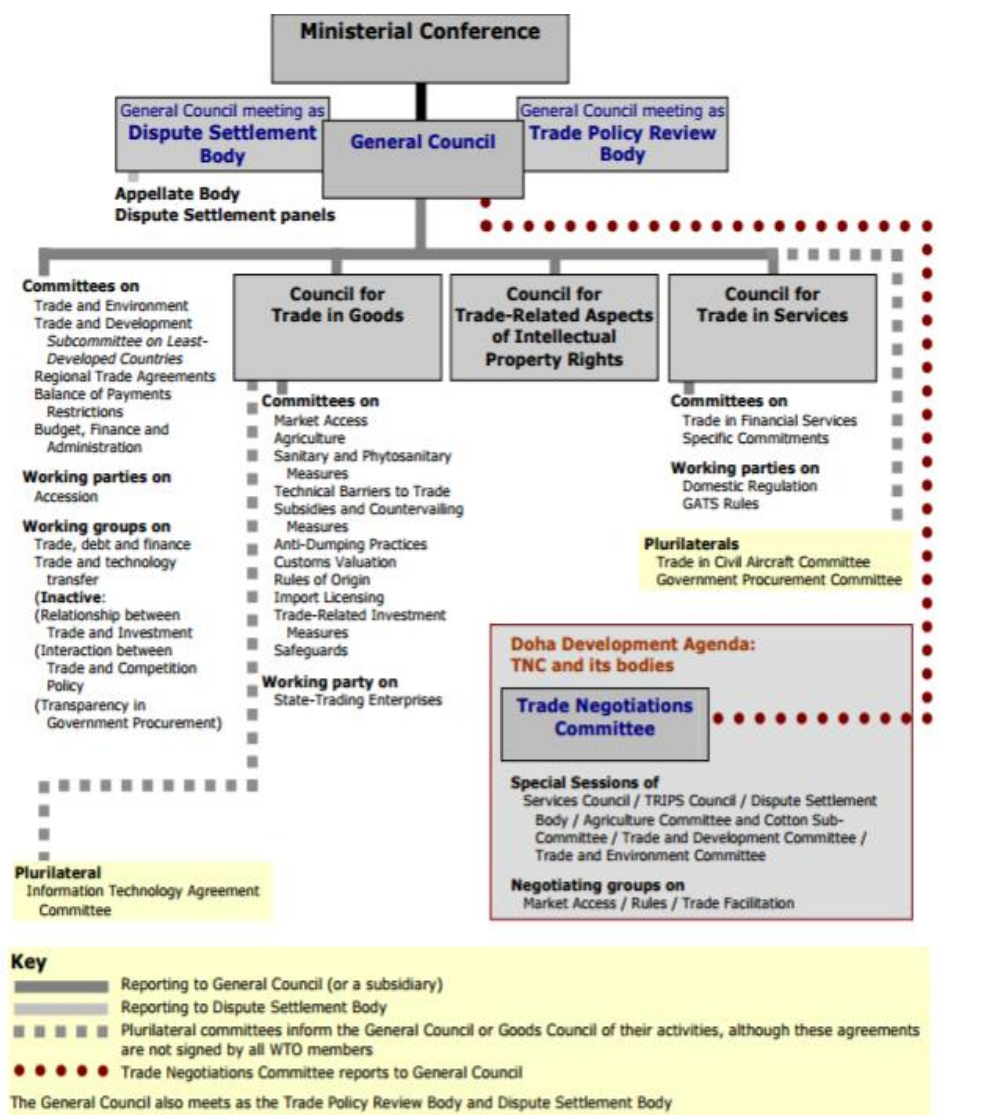
³The Uruguay Round was a decisive moment as it resulted in the famous Uruguay Round Agreements which include the Marrakech Agreement Establishing the World Trade Organization. The Uruguay Round started in 1986 and ended in 1994 and involved 123 countries.

DSU. The WTO further embodies all decisions of the Contracting Parties. It is this system and the rules that make up the body of law known as international trade law.

The WTO was established through the Marrakech Agreement signed on 30th April 1994 in Marrakech, Morocco and came into being on 1st January 1995. The WTO replaced the GATT Secretariat as the organization charged with the overall administration of the multilateral trading regime. Its basic structure includes the following bodies: The Ministerial Conference; The General Council; The Trade Policy Review Mechanism; The Dispute Settlement Body (DSB); Councils; The Secretariat and Directorate; and Committees. The structure of WTO is summarised in the figure below and more on the functions of the various bodies can be accessed at: https://www.wto.org/english/thewto_e/whatis_e/tif_e/organigram_e.pdf.

The Ministerial Conference is the topmost decision-making body of the WTO. It usually meets every two years bringing together all members of the WTO including EAC Partner States. It takes decisions on all matters under any of the multilateral trade agreements.

Figure 2.2: Structure of WTO



Source: WTO website- https://www.wto.org/english/thewto_e/whatis_e/tif_e/organigram_e.pdf; Accessed June 2017

WTO negotiations take place in the trade negotiations committee and its subsidiaries. Other work under the work programme takes place in other WTO councils and committees. All WTO members may participate in all councils, committees, etc., except Appellate Body, Dispute Settlement panels, and plurilateral committees. Organization and management of the negotiations under the current Doha Development Agenda round (DDA) can be accessed at: https://www.wto.org/english/tratop_e/dda_e/work_organ_i_e.htm

Given the central role played by the Committee on Trade and the Environment within the context of this module, space is now devoted to discuss this further. The Committee on Trade and the Environment (CTE) was established as a successor to the Group on Environmental Measures and International Trade established in 1971. Perhaps telling of the uneasy relationship between trade and the environment, GEMIT had never met since its inception until 1992 in light of the Rio Earth Summit. The Marrakech Agreement set out the role of the CTE as entailing the responsibility:

- To identify the relationship between trade measures and environmental measures, in order to promote sustainable development; and
- To make appropriate recommendations on whether any modifications of the provisions of the multilateral trading system are required, compatible with the open, equitable and non-discriminatory nature of the system.

In light of the foregoing mandate, the CTE developed a 10-item agenda for work. However, the CTE's mandate was adjusted in light of the 2001 Doha Ministerial Conference. One key development from this conference was the Doha declaration, which in paragraph 31 charged the CTE to focus primarily on three issues:

- The relationship between the WTO and MEAs;
- Procedures for information exchange between MEA Secretariats and the WTO, and the criteria for granting MEA secretariats observer status in WTO meetings; and
- The reduction or elimination of barriers to trade in environmental goods and services.

The significance of this mandate was to change the CTE from a mere discussion forum to one with the mandate to carry out trade negotiations. These negotiations would then feed to the final outcome of the Doha Development Round. In pursuance of its previous mandate, the CTE was further instructed to give particular attention to three issues. This, however, was not in the sense of carrying out negotiations but merely to promote the development of debate around these issues. They include:

- The effect of environmental measures on market access, and the environmental benefits of removing trade distortions;
- The relevant provisions of the TRIPS Agreement; and
- Labelling requirements for environmental purposes.

Progress in negotiations on environmental goods and services under Doha has been slow, with the difference between developing and developed countries greatly contributing to this slow process.

Frustrated with the limited progress in advancement in environmental good negotiations, a group of eighteen WTO members launched plurilateral negotiations for the establishment of the Environmental Goods Agreement (EGA) in 2014. The agreement being negotiated seeks to promote trade in a number of key environmental products, such as wind turbines and solar panels. The number of participants in these negotiations has grown, representing 46 WTO members as of 2016. Although gaps still exist between participants on various issues, discussion have set stage for further talks.

Only a few developing countries have expressed a desire to participate in these negotiations mainly because of competing interests to preserve high tariff rates so as to protect domestic industries and/or to express their dissatisfaction with the current mode of negotiations (Wu, 2017).

Food and Agriculture Organisation

The FAO has seven core mandates:

1. Facilitate and support countries in the development and implementation of normative and standard-setting instruments such as international agreements, codes of conduct, technical standards and others. This work will be developed at global, regional and national levels through global governance mechanisms, policy dialogue and support and advice, coupled with the development at country level of the necessary policies and institutional capacities for their implementation.
2. Assemble, analyze, monitor and improve access to data and information, in areas related to FAO's mandate. This includes the development of global and regional trends, perspectives and projections and the associated responses by governments and other stakeholders (e.g. policies, legislation and actions); also direct support to countries in the development of institutional capacities to respond to the identified challenges and possible options.
3. Facilitate, promote and support policy dialogue at global, regional and country levels. FAO as an intergovernmental organization is especially well positioned to help countries at national and international levels to organize policy dialogue activities directed to improve the understanding on important issues and to the establishment of agreements between stakeholders and/or countries.
4. Advise and support capacity development at country and regional level to prepare, implement, monitor and evaluate evidence-based policies, investments and programmes. This includes advice and support for activities directed to institutional strengthening, human resource development and direct advice to programme implementation.

5. Advise and support activities that assemble, disseminate and improve the uptake of knowledge, technologies and good practices in the areas of FAO's mandate. FAO as a knowledge organization needs to be at the forefront of knowledge and technology in all the areas of its mandate and be a source and organizational instrument to support countries in the utilization of available knowledge and technologies for development purposes.
6. Facilitate partnerships for food and nutrition security, agriculture and rural development between governments, development partners, civil society and the private sector. FAO has a broad mandate that includes major development problems that need to be targeted from a broad and comprehensive perspective. However, FAO will focus its work on the areas in which it has special competence and will establish strong partnerships with other organization to cover other complementary actions required.
7. Advocate and communicate at national, regional and global levels in areas of FAO's mandate. FAO has a main responsibility in providing communication and information services in all areas of its mandate to countries and the development community and to strongly advocate on corporate positions in relation to relevant and urgent development issues.

On dissemination of information, FAO has FAOSTAT, which is a statistical database on agriculture, nutrition, fisheries, forestry and food aid agriculture, nutrition, fisheries, forestry and food aid covering over 210 countries; statistics on agriculture including on crops, livestock, irrigation, land use, fertilizer, pesticide consumption, and agricultural machinery; forestry (statistics on imports and exports of woods and paper); fisheries and aquaculture information to help promote responsible aquaculture and fisheries; forestry country profiles (distribution of world forests); Global Livestock Production and Health Atlas (GLiPHA). More specifically, statistics is provided by four different bodies:

- Agro-maps providing spatial database of subnational agricultural land-use statistics
- AQUASTAT (information system of water and agriculture)
- CountrySTAT (a national statistical information system for food and agriculture)
- TERRASTAT houses databases containing information on major soil constraints, soil in deserts and dry land areas, population distribution, steep lands analysis, land degradation severity and human-induced land degradation due to agricultural activities

Other information support includes: PAAT platform to promote integrated trypanosomiasis control; and a global strategy to improve agriculture and rural statistics which provides a vision for national and international statistical systems to produce the basic data and information to guide decision-making.

United Nations Industrial Development Organization

The United Nations Industrial Development Organization (UNIDO) focuses on promoting industrial development for poverty reduction, inclusive globalization and environmental sustainability (UNIDO, 2017). Its mission is “to promote and accelerate inclusive and sustainable industrial development (ISID) in developing countries and economies in transition” (Ibid, online).

The policy making organs of UNIDO include the General Conference and the Industrial Development Board (IDB). The Programme and Budget Committee (PBC) comes as a subsidiary organ of the IDB. The General Conference determines the guiding principles and policies and approves the budget and work programme. Every four years, the Conference appoints the Director General. It also elects the members of the IDB and those of the Programme and Budget Committee. The General Conference meets every two years. The IDB is made up of 53 members, all elected on a four-year term and on a rotational basis. The IDB’s mandate is to review the implementation of the work programme, the regular and operational budgets and makes recommendations to the General Conference on policy matters, including the appointment of the Director General. The IDB meets once a year. Lastly, the PBC is made up of 27 members, elected for a two-year term and meets once a year. By the time of completing the write-up of this training manual, UNIDO had a membership of 170 Member States (UNIDO, 2017).

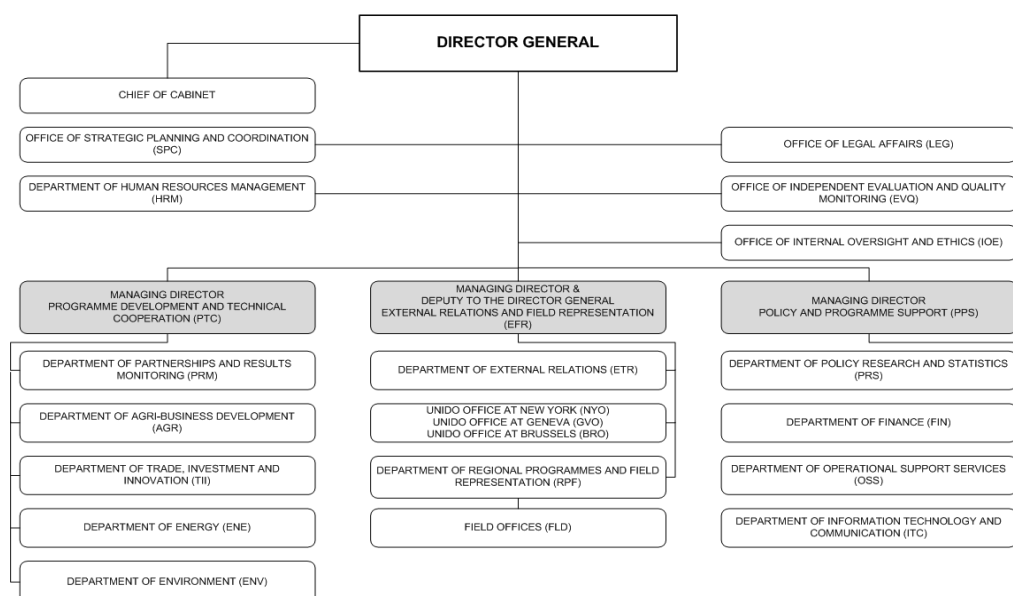
UNIDO operates on along programmatic focus areas structured in three thematic priorities namely: Creating shared prosperity; Advancing economic competitiveness; and Safeguarding the environment (UNIDO, 2017). In addition, these programmatic fields are made up of a range of individual programmes implemented holistically to achieve effective outcomes and impacts through UNIDO’s four enabling functions: (i) technical cooperation; (ii) analytical and research functions and policy advisory services; (iii) normative functions and standards and quality-related activities; and (iv) convening and partnerships for knowledge transfer, networking and industrial cooperation (Ibid). UNIDO’s organisation chart is presented in Figure 2.3.

As an entity, UNIDO has fully embraced the 2030 Agenda for Sustainable Development (AfSD) discussed earlier in Module 1. Specifically, UNIDO’s mandate is embodied in SDG9 that stipulates an ideal to “Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation” (United Nations, 2015). The SDG under consideration links well with the entire subject of agro-industrial development under CC-FS-T nexus.

From Figure 2.3, it emerges that UNIDO has dedicated departments of (1) Agri-business development, (2) Trade, Investment and Innovation, (3) Energy, (4) Environment, and (5)

Policy Research and Statistics. All the departments mentioned here have mainly direct links to what the training for the EAC stakeholders is focusing on. To this end, the EAC and its national governments tend to benefit if they can determine how best to relate and cooperate with UNIDO.

Figure 2.3: UNIDO as an organization



Source: UNIDO <http://www.unido.org/who-we-are/unido-in-brief.html> (Accessed 12 April 2017)

UNIDO has strong presence in the EAC through its Inclusive and Sustainable Industrial Development (ISDI) regional programme adopted by UNIDO Member States at the General Conference in December 2013. The ISDI regions in Africa include East Africa⁴, Central Africa, Southern Africa and Western Africa. In East Africa, UNIDO has a Regional Office in Ethiopia, Field Offices in Kenya and Tanzania and Desk Offices in Rwanda and Uganda. UNIDO also has a regional Partner Associations that include the African Union and EAC (UNIDO, 2017).

UNIDO has spelt out a number of African regional development priorities that include among those of interest to this training the following:

- African Union’s Agenda 2063;
- African Union Action Plan for the Accelerated Industrial Development of Africa (AIDA);
- The AU/NEPAD Action Plan on Advancing Regional and Continental Integration in Africa (2010-2015);
- The African Union Pharmaceutical Manufacturing Plan for Africa (PMPA);

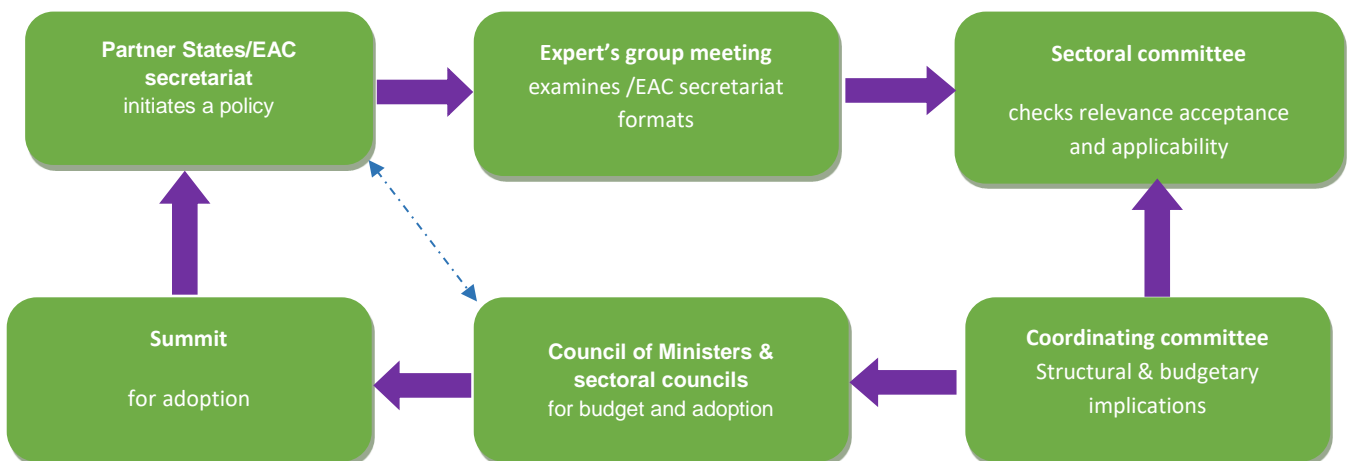
⁴ The eight countries include Burundi, Eritrea, Ethiopia, Kenya, Rwanda, South Sudan, Tanzania and Uganda.

- The African Agribusiness and Agro-industries Development Initiative (3ADI);
- The Istanbul Plan of Action 2011-2020; and
- The Vienna Programme of Action 2014-2024.

Responsible bodies and policy making process at the EAC level

There are a number of bodies involved in the trade, food security, climate change and agro-industry policy in the EAC. The general EAC policy or decision-making process is summarized in Figure 2.4.

Figure 2.4: EAC decision and policy making structure and cycle



Source: EAC (2012)

The key actors include the following:

The Summit

The Summit is made up of the Heads of State of the Partner States, its purpose is to give general direction and thrust to the development and achievement of the Community's objectives. It considers Community's annual progress reports and any other reports submitted to it by the Council of Ministers. Key activities related to policy and decision making are the functions of assenting to Bills, and publishing rules and orders in the East African Gazette, after which the rules come into effect.

Council of Ministers and Sectoral Councils

The Council of Ministers is made up of ministers responsible for regional co-operation of each Partner State and other ministers of the Partner States as determined by each Partner State. Some of the Council's functions include: promotion, monitoring and reviewing implementation of community programmes and ensuring Community's proper functioning. It also establishes Sectoral Councils to address specific Community matters, when necessary.

Coordinating Committees

This Committee is made up of Permanent Secretaries responsible for regional co-operation in each Partner State and other Permanent Secretaries as determined by each Partner State. Among the functions of this Committee is implementation of decisions of the Summit and the Council of Ministers and; co-ordination of the activities of the Sectoral Committees.

Sectoral committees

Each Sectoral Committee is responsible for the preparation of a comprehensive implementation programme and the setting out of priorities with respect to its sector; monitoring and keeping under constant review the implementation of the programmes of the Community with respect to its sector and submission from time to time, reports and recommendations to the Co-ordination Committee either on its own initiative or upon the request of the Co-ordination Committee concerning the implementation of the provisions of this Treaty that affect its sector.

They are made up of senior officials from Sector Ministries including Trade, Industrial Development, Finance, Infrastructure and Services, Maritime Transport, Health, Agriculture and Environment management from the Partner States.

Non-state actors including private sector and civil society organizations are represented at the national level and at the regional level as part of the experts group. ***A more consultative dialogue framework for private sector and civil society was adopted by the EAC Council of Ministers in 2012.***

Other actors in the EAC policy and decision-making machinery include the following:

The East African Court of Justice

The East African Court of Justice is a judicial body which ensures the adherence to law in the interpretation and application of and compliance with the Treaty. The Court consists of a First Instance Division and an Appellate Division. The First Instance Division has jurisdiction to hear and determine, at first instance, subject to a right of appeal to the Appellate Division under Article 35A of the Treaty, any matter before the Court in accordance with the Treaty.

The East African Legislative Assembly

The East African Legislative Assembly is the legislative organ of the Community and liaises with the National Assemblies of the Partner States on matters relating to the Community; debates and approves the budget of the Community; considers annual reports on the activities of the Community; audits annual reports of the Audit Commission and any other reports referred to it by the Council; discusses all matters pertaining to the Community and make

recommendations to the Council as it may deem necessary for the implementation of the Treaty; may for purposes of carrying out its functions, establish any committee or committees for such purposes as it deems necessary and shall recommend to the Council the appointment of the Clerk and other officers of the Assembly.

Responsible bodies for climate change policy making

For climate change policy, the EAC Secretariat, Sectoral Council on Environment and Natural Resources and its Sectoral Committee are the main actors. The private sector and civil society participate at the six expert groups dealing with environment and natural resources which include: Terrestrial Ecosystems; Aquatic Ecosystems; Pollution Issues; Policy, Legal and Institutional Frameworks; Bio-safety; and Climate Change.

The EAC Secretariat is also in charge of facilitating National Climate Change Roundtables in the Partner States of Burundi, Kenya, Rwanda, Tanzania and Uganda. The objective of these roundtables is to identify the priorities of each nation in regards to climate change, this information is then used to formulate a common African position on climate change (EAC, seen on 2017).

Responsible bodies for food Security policy making

EAC Sectoral Council on Agriculture and Food Security is one of the actors within the EAC level that deal with food security policy making. The council is made up of Ministers on Agriculture and Food Security, senior officials and Permanent/Principal Secretaries of Agriculture from the EAC Partner States. 110. The decision to develop the EAC protocol on SPS was adopted during the first meeting of the EAC Sectoral Council on Agriculture and Food security, held in September 2006.

Another tool within the EAC for dealing with food security is the EAC Steering and Technical Management Committee on Disease and Control used to harmonise and improve coordination of disease prevention and control. This committee has developed three instruments to tackle (1) Transboundary Disease Control and Zoonosis; (2) EAC Contingency Plan; (3) An EAC Communication Strategy on Avian Influenza and other TADs. The main goal of these instruments is to provide a strategy that disseminates the appropriate targeted information at the right time to the right people.” (EAC, 2017).

Responsible Bodies for trade policy making

Aside from the Secretariat, one other responsible body is the EAC Committee on Trade Remedies. The objective of this committee is to deal with matters relating to the rules of origin, anti-dumping measures, subsidies and countervailing measures and any safe-guarding measures that are provided for under the East African Community Customs Union. The committee is composed of nine members, three from each Partner State and its functions are clearly provided in the Protocol (EAC, 2017).

There is also the East African Standards Committee (EASC) aimed at developing new and harmonizing existing standards in the region. The committee is constituted of representatives from the public sector, national Quality System Institutions, and the private sector. In addition, there are four subcommittees focused on standards, quality assurance, metrology, and testing.

Finally, the EAC competition authority works in collaboration with national competition institutions within the member states in the implementation of the EAC Competition Act. The committee provides assistance in the investigation and enforcement of decision taken at the regional level. Moreover, there is the EAC Council of Ministers which are responsible for the final declaration of East African Standards.

Responsible bodies for agro-industry policy making

A crucial policy-making body within the EAC is the Council of Ministers that carries the function of implementing projects and programs under industrial development such as the East African Industrial Development Strategy, the promotion of new technologies and infrastructure necessary for industrial development, the improvement of quality and technical regulatory infrastructure to ensure compliance of industrial products to standards and technical regulations, the establishment of physical infrastructure for industrial development including industrial parks and special economic zones, the establishment of a regional mechanism for developing human capacity for industrial and technological advancement, regional support for Public Private Partnership and Civil Society dialogue, the development of a regional mechanism to provide sustainable and affordable industrial development finance, and support for the development of a regional productive base for capital, intermediate goods and tools.

There is the Sectoral Council on Industrialisation focused on the implementation of the EAC Industrialisation Strategy which will also be supported by technical teams convening under the proposed Sectoral Committee on Industry.

The EAC Secretariat manoeuvres through the Industrial Development Department to facilitate the implementation of the decisions taken by EAC Policy organs such as the Summit, Council of Ministers, and the Sectoral Council on Industrialization.



Exercise

In plenary, to identify key stakeholders at the EAC level that may assist Uganda in designing national policies, particularly the industrial policy revision.

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MODULE 3: POLICY ANALYSIS

Module Objective ● ● ● ●

To increase understanding of the stakeholders attending the national Uganda training workshop on relevant national and EAC wide policies on industry and/or agro-industrial development in the context of CC-FS-T interface. This will enable participants to recognize contradictions, overlaps, gaps, etc., in the different policies and become familiar with effective policy responses to deal with agro-industrial development under the CC-FS-T nexus.

Learning Outcomes ● ● ● ●

After going through this module, it is expected that the participants (mainly policy-makers in Uganda) will sharpen their skills enabling them to analyse both the national and EAC wide policies and contribute to policy-making that will result in favourable outcomes in dealing with industry and/or agro-industrial development in the face of CC-FS-T interface, especially the planned revision of the National Industrial Development Policy.

Module Content ● ● ● ●

This module focuses on national and EAC policies addressing the issues of industry and/or agro-industrial development as this relates to CC, FS and trade. Specifically, the following policies will be discussed:

- Uganda National Industrial Policy (2008)
- Uganda National Trade Policy (2007)
- Uganda National Climate Change Policy (2015)
- Uganda National Agriculture Policy (2011)
- EAC Climate Change Policy;
- EAC Common Market Protocol;
- EAC Climate Change Master Plan and Strategy;
- EAC Agriculture and Rural Development Strategy;
- EAC Vision 2050;
- EAC Industrialization Policy and Strategy; and

- A new global sustainable development agenda and Africa Agenda 2063.

Uganda National Policies of Interest

For participants to have a good grasp of matters pertaining to the review and revision of Uganda's National Industrial Policy in the context of climate change, trade and agro-processing, this section will review identified policies as follows:

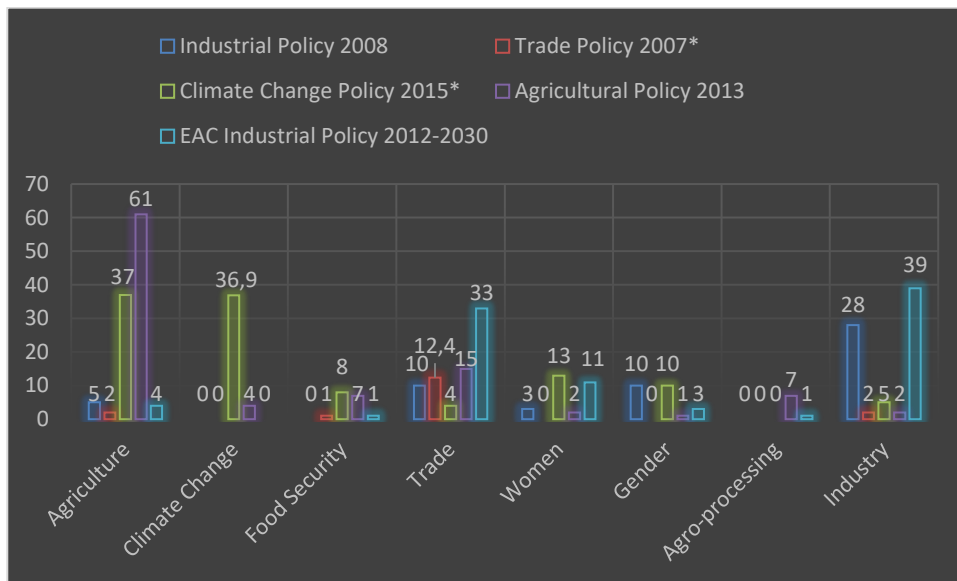
- Uganda National Industrial Policy (2008)
- Uganda National Trade Policy (2007)
- Uganda National Climate Change Policy (2015) and
- Uganda National Agriculture Policy (2011)

However, before a policy by policy discussion is made, it is necessary to get an overview in terms of how these policies have mainstreamed issues related to agriculture, climate change, food security, trade, gender, industrialisation and agro-processing.

Given the nature of this module, it is paramount that one starts with a general overview in terms of how certain critical concepts and terminologies are mainstreamed in such Ugandan Policies. This will be followed by a policy by policy discussion of key elements, with a focus on the interlinkages between agro-processing, trade and climate change. Given the key goal of the training, emphasis in the policy by policy discussion will be given to the Ugandan Industry Policy of 2008. The emerging findings regarding a simple word count on the key terms and concepts is shown in Figure 3.1.

Overall, what comes out from this analysis is that mainstreaming critical concepts and understanding across the Ugandan and possibly EAC policy framework remains a challenge. For example, Uganda's Industrial Policy of 2008 does not at all mention concepts like climate change, food security and agro-processing. Similarly, the Ugandan Trade Policy of 2007 lacks in half of the concepts addressed. It does not make any reference to climate change, women, gender and agro-processing. Likewise, the Ugandan Climate Change Policy of 2015 does not refer to agro-processing, yet this industry is vulnerable to changing climate. The EAC Industrial Policy of 2012-2030 also skips making reference to climate change. In this generation, this remains a challenge even though there is a standalone EAC policy of climate change.

Figure 3.1: Word count for key concepts and terms in policies



Source: Author

NB: * Given the outlier nature in terms of some high frequencies that emerged in two instances on Climate Change Policy for the term ‘climate change’ that had 369 counts, and trade for the Trade Policy that had 124 counts, the twin figures are reflected as 36.9 and 12.4 respectively in the graph.

On the positive, concepts like agriculture, trade and industry are mainstreamed (though to varying degrees) across the policies. As indicated earlier, further discussions on each of the identified policies will now be considered in the next sections. The main matters to be teased will include agro-processing, trade and climate change nexus and any other matters deemed necessary by the author.

Uganda National Industrial Policy 2008

Given the nature of debates surrounding climate change in the mid to late 2000s, it remains a fact that there are many national, regional, continental and global policies embedded issues on climate change. This period is identified as one in which the world was either in denial and/or sceptical on climate change. It was only in 2007 when the IPCC published the fourth assessment Report (AR4) that the world came to a consensus that climate change was real, happening and something urgent needed to be done. To this end, one will not expect the Uganda National Industrial Policy to have mainstreamed climate change. Hence a score of zero (0) on word count came up for this element. Drawing from the same reasoning and flow of debate, one may not be off the mark to expect that the period +/-3 years from 2007 is one surrounded by many policies being silent on matters of climate change.

On the whole, the Uganda National Industrial Policy (Government of Uganda, 2008), being a 'Framework for Uganda's Transformation, Competitiveness and Prosperity' comes up in five main sections dealing with: the vision and objectives, constraints and challenges, key policy considerations, guiding principles and policy actions, and an implementation and monitoring framework.

The vision of the Policy (Government of Uganda, 2008: 7) is to "build the industrial sector into a modern, competitive and dynamic sector fully integrated into the domestic, regional and global economies". Although the word modern remains relevant today, modern then would have been different as there is the current 4th Industrial Revolution that is now focusing on green development and innovation.

However, there are fundamental matters covered in the objectives of the Policy that remain relevant and that can be refined with the current knowledge of where the world is going and where Uganda wishes to be. For example, there are a number of objectives speaking to agriculture, sustainable development and gender these include the following (Government of Uganda, 2008: 8):

- Create a framework that supports joint participation of the public and private sectors in the development of scientific and technological competencies for the production of more and higher value-added goods and services ... and increase integration with Agriculture (objective 4).
- Promote environmentally sustainable industrial development to reinforce national goals of long-term growth and development (objective 7).
- Promote the participation of disadvantaged sections of society in industrial development activities (objective 10).

What is of interest is to note the sustainability of the environment, which is being spoken of in the Policy as the government would have been concerned about polluting industries relocating to Uganda but running away from pollution charges and penalties that would have been imposed on them in their home countries due to their stringent environmental laws.

In assessing the country's strengths, natural resources are highlighted as one key area. The terrain and rivers are said to provide a unique environmentally friendly hydro-electricity generation (Government of Uganda, 2008). Agricultural production was identified as the backbone of the economy with diverse production including coffee, tea, cotton, sugar, fish, floriculture, maize, pineapples and livestock. Given the trends in climate change, the agriculture sector in Uganda is not immune and matters of climate compatible agriculture are now key moving forward. In climate compatible agriculture, Uganda needs to consider strategies and actions to address both adaptation and mitigation issues. In fact, climate change is having significant negative impacts on agriculture with extreme events like hailstorm, droughts etc. having already negatively affected production (Figure 3.2).

In as much as the Policy acknowledges the key role played by agriculture, low productivity on the farms was deemed to limit the cost of competitiveness of agricultural raw materials needed by the industries. The Policy further discusses high post-harvest losses although several value chains (coffee, tea, fisheries, and dried fruits) were recorded as having demonstrated that capacity is available to improve productivity (Government of Uganda, 2008). There is, however, no mentioning of agro-processing in the Policy.

Among the threats identified then were issues of HIV/AIDS and Malaria. These diseases were viewed as having negative impacts on industrial production as 530,000 people were living with HIV/AIDS. Hence, between 30-40% of absenteeism were related to the two diseases (Government of Uganda, 2008).

Figure 3.2: Hail Storm in Kashaka, Kashari, Mbarara District (2007)

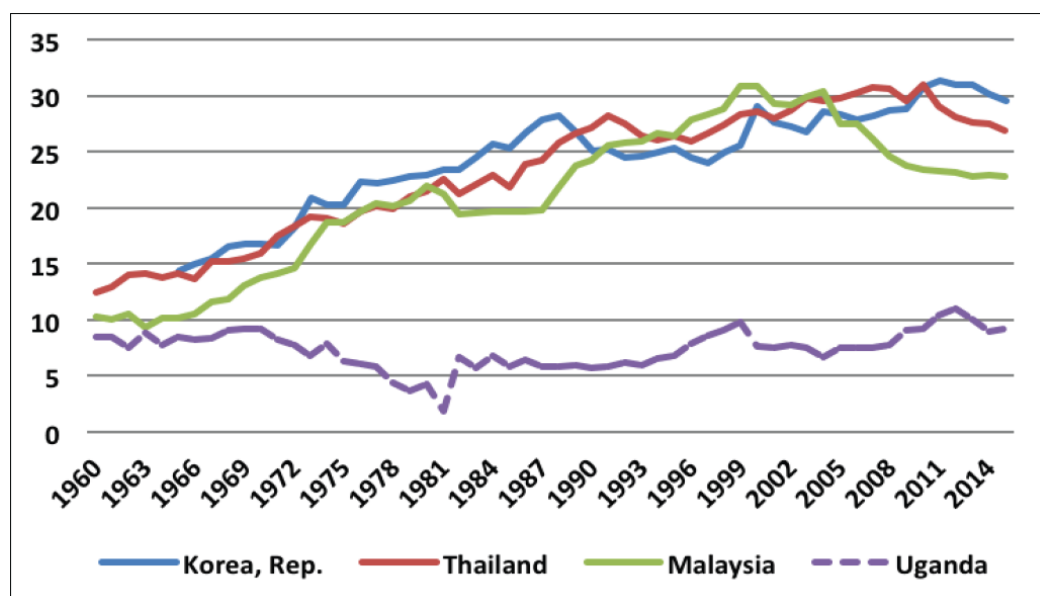


Source: EAC 2011:23

From the recommended actions, the government indicated its desire for industrial transformation to be pursued “in a manner that ensures efficient resource utilization and environmental sustainability” (Government of Uganda, 2008). Although the concepts of green industrialisation and green economy may not have been there then, the current Policy lays an excellent platform to mainstream such concepts in the planned revisions. Further details on the required actions to be undertaken are found on page 25 of the policy document. The Policy also presents an action on Gender in industrial development (bullet 4.2.11) and further actions are documented on the same page.

From a recent assessment on the Economic Development and Industrial Policy in Uganda by the Friedrich-Ebert-Stiftung, a number of concerns were raised regarding the country's industrial policy. Friedrich-Ebert-Stiftung (2017), highlights that although Uganda's development strategy is outlined in the National Development Plans (NDPI and NDPII), which are aimed at achieving the Uganda Vision 2040, the implementation of such development trajectory remains uncoordinated and non-coherent. The main reason being a weak National Industrial Policy. In fact, Uganda's manufacturing value added as percentage of GDP remains low. Figure 3.3 compares Uganda's manufacturing value added with other emerging and middle-income countries. In terms of performance, only about 30% of the desired policy targets in the sugar, textiles, iron ore and cereals sub-sectors have been achieved (Ibid).

Figure 3.3: Manufacturing value added (% of GDP) in selected countries (1960-2014)



Source: World Bank, in Friedrich-Ebert-Stiftung (2017: 10)

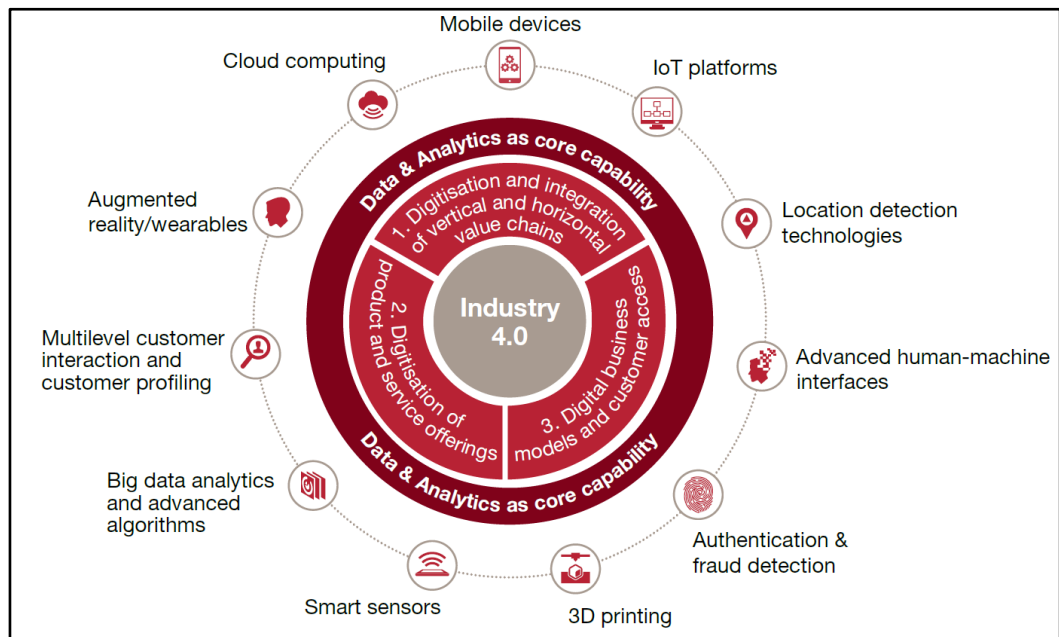
The main findings show that the five leading *constraints* undermining domestic manufacturing include: limited access to affordable credit, infrastructure bottlenecks particularly relatively expensive electricity and bad roads, skills-gap, competition from low-cost producer countries and production of sub-standard products (Friedrich-Ebert-Stiftung, 2017). As for policy implementation, the five key hurdles identified include: corruption, poor management, non-coherence in policy implementation, inadequate government financial support and political interference.

The report then recommends urgent interventions needed from the Ugandan government to realise its objectives. The interventions include the reviews of both the content and realization of its industrial policy. Emphasis should be on clustering, infrastructure development, harnessing technology, encouraging innovation, raising productivity as well as providing incentives for manufacturing.

All the intervention measures raised in here may not be implemented without looking at the current and future trends in climate change, general sustainable development matters and green innovation and industrialisation as well as the 4th Industrial Revolution (industry 4.0). Furthermore, the government needs to consider radical measures to improve the skills base. Only when such challenges are addressed may Uganda transition into the middle-income economy.

Talking about the 4th Industrial Revolution, space is allocated for its brief consideration below. The PWC (2016) maintains that the term 'Industry 4.0' stands for the 4th Industrial Revolution. However, there are other related terms like the 'Industrial Internet' or the 'Digital Factory'. In fact, Industry 4.0 could be all about building a digital enterprise. The main features of Industry 4.0 are presented in Figure 3.4. Hence, the proposed revisions of the National Industrial Policy may not ignore Industry 4.0 issues.

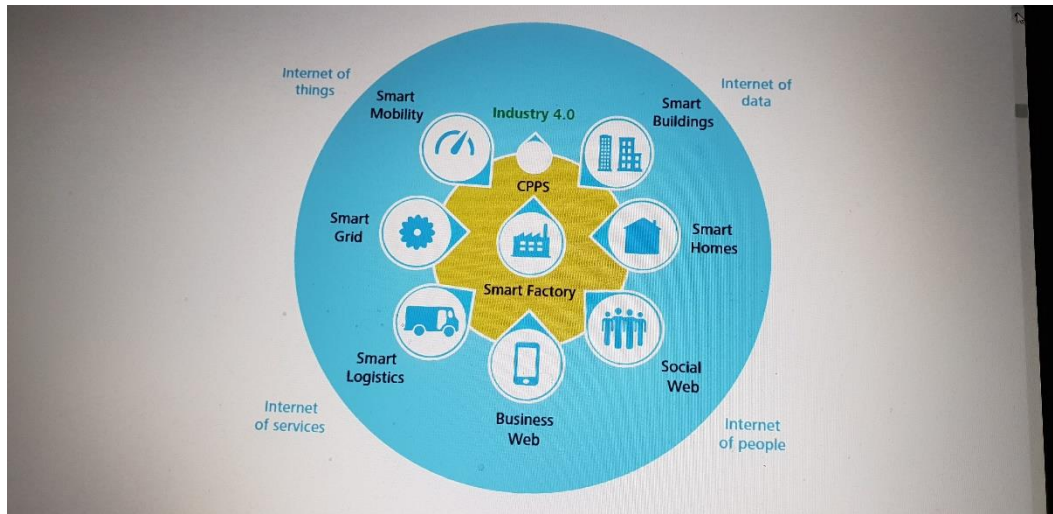
Figure 3.4: Main features of Industry 4.0



Source: PWC 2016: 6

Deloitte (2015) also explores Industry 4.0. From Deloitte's perspective, Industry 4.0 harnesses "a further developmental stage in the organisation and management of the entire value chain process involved in manufacturing industry" (Ibid.: 3). Through the management of the value chains, Industry 4.0 addresses all industries including the agro-industry. This scenario then raises the world as portrayed in figure 3.5.

Figure 3.5: Industry 4.0 from Deloitte's view



Source: Deloitte (2015: 4)

Uganda National Trade Policy (2007)

The Trade Policy hoped to pull Uganda out of poverty into wealth and prosperity (Government of Uganda, 2007). Out of the eight concepts related to the subject under discussion in this training upon which the word search and counts were done, only half could be identified in the Trade Policy. Those identified were: agriculture (3 hits), food security (single hit), trade by default (124 hits) and industry (2 hits).

The Mission of the Policy is spelt out as developing and nurturing private sector competitiveness, including supporting the productive sectors of the economy to trade at both domestic and international levels. The government then stipulates the “ultimate objective of creating wealth, employment, enhancing social welfare and transforming Uganda from a poor peasant society into a modern and prosperous society” (Government of Uganda, 2007: 11).

Agriculture comes under the situation analysis of the Ugandan economy that is said to be dominated by three main sectors namely: services, agriculture and industry. The Trade Policy then further highlights that there was very limited orientation towards commercial agriculture as it remained pre-dominantly subsistence. Some trends in Uganda's trade numbers are shown in figures 3.6 and 3.7.

Figure 3.6: Uganda's top exports in 2016

In 2016, Uganda exported \$2.85B, making it the 122nd largest exporter in the world. During the last five years, the exports of Uganda have increased at an annualized rate of 3.4%, from \$2.5B in 2011 to \$2.85B in 2016. The most recent exports are led by gold, which represents 24.8% of the total exports of Uganda, followed by coffee, which accounts for 13.7%

From the forgone, matters of agro-processing, climate change and food security are hardly addressed in Trade Policy. Hence, future moves to revise the Trade Policy should consider strongly mainstreaming the highlighted issues including careful consideration in terms of how the trade and industrial policies should link.

Climate Change Policy 2015

The Climate Change Policy comes in six main parts namely: the Introduction and International Background for the Climate Change Policy; Why Climate Change matters to Uganda; Policy framework; Policy Directions; Implementation Arrangements – From Policy to Action; and Monitoring, Reporting and Evaluation (Government of Uganda, 2015). The Policy presents a fundamental and strong entry point in terms of mainstreaming (Box 1).

Box 1: Mainstreaming and Coordinated Response to Climate Change

This policy is not meant to replace sectoral policies, but rather to provide a framework for the harmonisation and coordination of the various sectoral efforts already underway and to be put forth in the future. At the core of this policy is the recognition that climate change is a fundamentally multi-sectoral issue, and that all sectors and categories of stakeholders must therefore be actively involved for the implementation of the policy to be a success. This especially calls for the mainstreaming of climate change concerns in the relevant sectoral, national and local policies, plans and budgets.

Source: Government of Uganda, 2015: 13)

What is worth highlighting from Box 3.1 and in light of this training is the fact that the Climate Change Policy “is not meant to replace sectoral policies”. Hence, as the Industrial Policy will be reviewed and revised, this statement remains fundamental. It is not expected that the industrial Policy should be another climate change, trade or agricultural policy. Rather, it should mainstream these elements adequately.

Given the scenario that this is a climate change policy, it is not surprising that 369 times the phrase ‘climate change’ appears in the Policy. To this end, and with the level of awareness on other sectors of the economy and society heavily impacted by climate change, one would expect that this Policy should address matters of gender, women, agriculture and food security. The Policy further emerges after the era of climate denial and scepticism as highlighted earlier.

True to the expectation, the Policy adequately touches on gender (10 hits), women (13 hits), agriculture (37 hits) and food security (8 hits). The policy further touches on trade (4 hits) and industry (5 hits). The only concept not addressed directly is agro-processing. With regard to agriculture, the Policy realises that this is one of the key sectors impacted by climate change as it is mainly rain-fed. As for industry, the Policy identifies the fisheries, tourism, construction and biofuels industries.

Agricultural Policy 2013

The Agricultural Policy is framed around seven main sections that include the following (Government of Uganda, 2013): introduction; background; guiding principles, objectives and strategies; agricultural support sector policies and services; implementation framework; monitoring and evaluation; and communication strategy.

The Agriculture Policy comes out as one balanced in terms of how it addresses some of the key concepts used for analysing the policies. For example, climate change has four hits, food security (7 hits), trade (15 hits), women (2 hits), gender (single hit), agro-processing (7 hits) and industry (2 hits).

The Agricultural Policy calls on government and its stakeholders to “develop capacity at all levels for planning and implementation of activities to address climate change and its impact on agriculture” (Government of Uganda, 2013: 21). This call is in line with the climate change mainstreaming agenda highlighted earlier. A summary on the impact of climate change on Uganda’s agriculture and food security is presented in Box 3.2.

Box 3.2: Climate change impacts on agriculture

The increased frequency and intensity of weather events linked to climate change including heavy rainfall, floods, and hailstorms, negatively affect agricultural activities and food security. Currently, there are no reliable predictions or early warning systems of the likely impacts of climate change in Uganda. In addition, drought and other climatic extremes are factors contributing to food insecurity in the famine prone areas of the Karamoja region and the cattle corridor between south-western Uganda and Karamoja. Most of these areas are semi-arid, with annual rainfall of less than 700 mm, which is subject to a high degree of unreliability both from year to year and in the distribution within each year.

Source: Government of Uganda, 2013: 24

Concerning trade, the Agricultural Policy (Government of Uganda, 2013: 18) indicates that as Uganda’s domestic and external trade in food and agricultural products increases, there will be a need to ensure compliance with internationally recognized product safety regulations and standards. Trade is also covered as part of the objectives of the Policy. In fact, objective 4 is crafted as follows: “Promote domestic, regional and international trade in agricultural products”. Six action points are then raised that will result in the promotion of this trade namely:

- Developing and expanding a sustainable nation-wide market information;
- Ensuring the development, maintenance and improvement of physical agricultural market infrastructure at strategic locations, including crop and livestock markets, abattoirs, and fish landing sites;

- Ensuring the development of infrastructure and utilities that are necessary for agricultural trade, including transport infrastructure and reliable access to fuel and electricity;
- Strengthening national capacity for quality assurance, regulation, and safety standards at all levels;
- Promoting Uganda's agricultural products in local and international markets; and
- Addressing supply and demand constraints to domestic, regional and international markets.

In the twin instances where agriculture is mentioned, the Policy speaks of agriculture being the most important sector in terms of raw materials for industry and exports to regional and international markets (Government of Uganda, 2013). The second part is when the policy refers to the need to develop the local fertiliser industry.

However, the manner in which gender and women matters are treated in the policy leaves more gaps. In those combined three instances that these matters are raised, women are just mentioned as an afterthought. "Community mobilization and empowerment is necessary for this policy to achieve its objectives of engaging women⁵, men, youth, and vulnerable populations in agricultural programs and ensuring optimal utilization of agricultural services" (Government of Uganda, 2013: 27). Since women form the bulk of stakeholders in this sector, their needs should be adequately and intentionally addressed in the agriculture policy. The other instance where women are mentioned is when the policy addresses vulnerability. The Policy, thus highlights, "Vulnerable groups include households headed by women⁶ and children, the elderly, the poor, and people living with disabilities and disease".

In terms of industries, and although not featuring many times, the Agricultural Policy highlights the importance of agriculture in feeding the industries with raw material. The document also emphasises the country's mineral potential such as in oil, lime and phosphates, which provides an opportunity to develop a local fertilizer industry.

⁵ Emphasis is the author's

⁶ Emphasis is the author's

Exercise

In plenary, to discuss the mainstreaming of the key concepts under deliberation in the following Ugandan policies:

- *Uganda National Industrial Policy (2008)*
- *Uganda National Trade Policy (2007)*
- *Uganda National Climate Change Policy (2015)*
- *Uganda National Agriculture Policy (2011)*

EAC Climate Change Policy Framework

EAC policies for climate change are guided by the regional policies articulated in the EAC Treaty, the region's Protocol on Environment and Natural Resources Management, East African Community Climate Change Policy (EACCCP), the Climate Change Master Plan and the EAC Vision 2050.

EAC Climate Change Policy

The aims of the EAC climate change policy are to address the adverse impacts of climate change in the EAC region and to contribute to development of policies and programmes aimed at widening and deepening cooperation among Partner States in line with the EAC Treaty (EAC, 2010).

The general objective is to guide EAC Partner States and other stakeholders on the preparation and implementation of collective measures to address Climate Change in the region while assuring sustainable social and economic development.

The Community's policy is founded on three key pillars of **adaptation, mitigation and climate change research** (monitoring, detection, attribution and prediction). The pillars are to be supported by the several capacity building areas including: technology development and transfer, finance, education, training and public awareness, information and knowledge management systems. Given the differentiated impacts of climate change on women, men and youth, and the roles

of women specifically in addressing climate change, the policy attempts to take gender considerations into attention.

On adaptation, the Policy aims at implementing urgent and immediate adaptation priorities identified in the National Adaptation Programmes of Action (NAPAs), National Adaptation Plans (NAPs) and climate change strategies.

Adaptation priorities identified include: strengthening meteorological services and improving early warning systems; disaster risk management through; risk reduction, preparedness, mitigation and reconstruction, scaling up of efficient use of water and energy resources, irrigation, crop and livestock production, strengthening pre and post agricultural losses, protection of wildlife and key fragile ecosystems such as wetlands, coastal, marine and forestry ecosystems, improving land use, soil protection, tourism, climate proofing social infrastructure, and reducing climate sensitive vector and water borne diseases.

On mitigation, the policy reiterates the importance of the EAC region to contribute to the reduction of GHG in the atmosphere through the preparation of Nationally Appropriate Mitigation Actions (NAMAs) for sectors with potentially high emission factors. This is important although the region has negligible contribution to global greenhouse gases (GHGs) emissions.


Critical sectors for mitigation measures identified include: energy, transport, agriculture, waste management and industry. The policy observes that Mitigation actions should not compromise the region's social and economic development but should position the region towards low carbon development pathways. mitigation measures prioritized in the Policy include; forestation, reforestation, promotion of energy efficiency, efficient crop and livestock production systems and efficient transport systems, waste management while capturing opportunities in emission reductions in the region provided for under the Clean Development Mechanism (CDM) of the Kyoto Protocol.

For implementation, each EAC Partner State is expected to create an enabling environment through policy, legislative and institutional frameworks so as to operationalize the provisions of the Policy. Partner States are to develop: national policies, strategies and institutional arrangements.

At the regional level, the Policy provides for an establishment of a regional Climate Change Coordination structure at the EAC Secretariat and an EAC Climate Change Fund. The aim of the Fund is to mobilize financial resources for the implementation of the Policy and instruments of implementing the Policy including the EAC Climate Change Strategy and Master Plan. The EAC Secretariat, other organs and institutions of the Community are to develop effective approaches to initiate follow up actions and establish partnership to ensure the successful implementation of the Policy. The approaches to be developed include: capacity building in terms of technical skills, knowledge and monitoring tools and address challenges related to technology development and transfer and access to finance.

EAC Climate Change Strategy and Master Plan

To implement the climate change policy, the EAC region has developed a climate change strategy and master plan. The two documents provide guidance and monitoring of implementation the CCP. The plan (2011-2030) sets out a long-term vision and a basis for EAC Partner States to operationalize a comprehensive framework for adapting to and mitigating climate change in line with the EAC Protocols on: Environment and Natural Resources Management and with international climate change agreements. It takes into account the EAC Climate Change Policy, EAC Climate Change Strategy, the EAC Protocol on Environment and Natural Resources Management and the EAC Food Security Action Plan. Recent projects on climate in EAC region are shown in the box below.

**Recent Projects on Climate Change in EAC**

1. National Climate Change Roundtables in the Partner States facilitated by EAC Secretariat (since 2009)
2. Climate Change Adaptation and Mitigation in Eastern and Southern Africa is an initiative of COMESA, EAC and SADC (2010 - 2014) that includes Climate-Smart Conservation Agriculture.
3. Planning for Resilience in East Africa through Policy, Adaptation, Research and Economic Development (PREPARED) program (2012-2016).

EAC Common Market Protocol

The Common Market (EAC, 2012) provides for the free movement of goods; free movement of persons; free movement of labour; right of establishment; right of residence; free movement of services; and free movement of capital. Other areas of cooperation include cooperation in: protection of cross-border investments; coordination of economic and monetary policy; coordination of financial sector policy; harmonization of tax policies and laws; prohibited business practices; prohibited subsidies; public procurement; consumer protection; co-ordination of trade relations; transport policies; harmonization of social policies; **environmental management**; statistics; research and technological development; intellectual property rights; industrial development; agriculture and food security.

The provisions of the market will contribute to increased trade, income and therefore are likely to contribute to improved food availability and food security in the region. In 2014, the first East African Common Market Scorecard was also launched. The initiative signalled Partner States' commitment to achieving regional integration and to doing so in a transparent way. Therefore, the

scoreboard indicates that Partner States in the EAC have undertaken a number of reforms over the years to facilitate the implementation of the Protocol. In the case of free movement of goods, Non-tariff Barriers (NTBs) have been addressed more quickly during the 2016 reference period than during the 2014 period. Falling from an average of 34 to eight (8) months per NTB.

Cooperation in environmental maintenance under the Common market is based on: The East African Community Protocol on Environment and Natural Resources Management; East African Community Protocol for Sustainable Development of Lake Victoria Basin; the Lake Victoria Transport Act, 2008; Protocol on the Establishment of the East African Community Customs Union; East African Community Customs Management Act, 2004; and other relevant provisions of this Protocol; and laws of the Community.

EAC Agriculture and Rural Development Strategy 2005-2030

The EAC Agriculture and Rural Development Strategy (EAC-ARDS- 2005- 2030) provides a road map of the strategic interventions by stakeholders for the accelerated development of the rural economy. The strategy identifies the causes of declining performance of the agricultural sector in the region as inadequate policy formulation and implementation; low technology development and transfer; poor supporting physical infrastructure and utilities; climatic and weather variability; natural resource degradation; and other factors such as HIV and aids. The objectives of the strategy include:

- i. Attaining food security in the community,
- ii. Liberalizing regional cross-border trade,
- iii. Harmonizing agricultural policies and regulations,
- iv. Increasing production of crops, livestock, fishery and forestry products,
- v. Attaining sustainable utilization of natural resources,
- vi. Developing markets and marketing infrastructure,
- vii. Reducing post-harvest losses,
- viii. Promoting value addition through agro-processing,
- ix. Protecting human, plant and environmental safety.

The strategy integrates all the four relevant areas of this training: food security, trade and agro-processing and climate change. Agro-processing is one of the key industrial sectors and this sector should be carefully integrated and addressed in the revised National Industrial Policy of Uganda. Among the key intervention areas identified are: improving food security; accelerating irrigation development; strengthen research, training and extension; increasing intra and inter-regional trade; promoting improvement of physical infrastructure and utilities; improving regulatory framework; promoting agro-industries development and value addition;

promoting emerging industries; mainstreaming cross cutting issues of HIV aids, and gender; promoting sustainable utilization of natural resources, improving accesses to reproductive resources including credit; controlling animal and plant pest diseases; and; financing agriculture and agro-processing.

As observed by PLUM- Uganda (2014), implementation of this strategy through respective policies including the EAC food security action plan, climate change policy and trade policy has made some strikes towards achieving its objectives, particularly the objective of improved conducive environment for promotion of Agricultural production, productivity and trade. However, agricultural production and productivity and food security have remained low while agro-processing has also remained stagnant. The limited performance of the strategy (PLUM- Uganda 2014) has been associated with implementation gaps at the regional and national levels, particularly limitations in synchronisation of programmes, action plans and prioritisation of actions at both levels. Financial and human resources especially with respect to national Ministries responsible for implementation also pose implementation challenges. Construction of the institutional implementation structure, particularly the inter-Ministerial Coordination Team, made up of all the stakeholders has also remained a challenge.

EAC Industrialization Policy and Strategy

The EAC industrial policy is articulated in the EAC Industrialization Policy covering the period 2012-2032 (EAC, 2012) and the region's Vision 2050. The general objective of the EAC Industrialization Policy is to create a modern, competitive and dynamic industrial sector that is fully integrated into the global economy. Industrialization is one of the pillars of EAC vision 2050, with the aim of leveraging the sector for structural transformation for improved intra-regional and global trade. Value addition along product value chains and product diversification based on the comparative and competitive advantages of the region are key instruments of achieving this aim. The industrial diversification strategy is focusing on enhancement of linkages between sectors in the economy, with emphasis on Small and Medium Enterprises (SMEs).

The EAC Industrialization Policy Strategy (EAC, 2012) outlines interventions through which the objectives of the Industrialization Policy will be achieved. These include: undertaking value chain studies and formulating action plans; instituting a framework for public-private sector partnership; formulating regional investment incentives; enhancing capacity of national and regional institutions for high value processing activities; development and dissemination of market intelligence and trade and investment information; setting up financial mechanism to support the development of projects and facilitating development of regional brands and packaging programmes.

The funding of the Strategy is through several initiatives, including setting up a regional industrial fund within the framework of the EAC Development Fund, Public Private Partnerships (PPPs), development partners, foreign direct investments and portfolio investments and the EAC financial and capital markets.

EAC Industrial Policy and agro-processing

The EAC Industrialization Policy identifies six strategic priority sectors with regional comparative advantages for the region's value chain development and proposes interventions for their support. Agro-processing as well as fertilizer and agro-chemicals are a part of these priority regional value chains. Based on industry attractiveness and strategic feasibility, agro-processing is assessed as the most important industry in the region. It is also the largest direct employer of all manufacturing industries, and present large indirect employment potential in the services sector through backward and forward linkages and hence has the highest growth potential in the region (EAC, 2014; EAC, 2015).

In addition to the Industrialization Policy, EAC Vision 2050 equally identifies agro-processing as a key component of the industrial transformation of the region. The EAC Food Security Action Plan (EAC, 2011) and the EAC Vision 2050 (EAC, 2015) emphasize the importance of agro- processing for economic growth and poverty reduction

One of the flagship projects under the industrialization pillar of the Vision is the 'Upgrading and Modernization (IUMP) for SMEs' whose goal is to transform SMEs into viable businesses, which in addition to creating employment, also contribute to value addition, income generation and export growth in the region. To this end, joint regional initiatives will aim at fostering industrial development within priority sectors with high potential for employment, income and export generation, and improving food security by providing common solutions to similar challenges facing SMEs in the region.

EAC Food Security Action Plan

The EAC Food Security Action Plan was finalised in 2011 (EAC, 2011) and addresses one of the EAC Treaty aimed at achieving food security and agricultural production. The Action Plan presents priority areas and detailed Action Plans. The Action Plan starts by highlighting that the EAC is frequently affected by food shortages and pockets of hunger. However, the EAC as a whole has a great potential and capacity to produce enough food for both regional consumption and a large surplus for export to the global market. The state of affairs outlined herein is said to be as a result of the following twin factors (EAC, 2011: 3): "inadequate food exchange/trade between times and/or places of abundant harvest on one hand, and those with deficit on the other; and (ii) high variability in production

caused by high variability of weather which is becoming worse due to climate change”.

Nine times in the document the Action Plan makes reference to climate change. In fact, Objective 8 under the detailed Action Plans stipulate the need “To improve capacity for emergency preparedness and adaptation to climate change impacts and response” (EAC, 2011: 23). Climate change, resulting from global warming is identified as causing extreme weather events that affect food production and security like droughts and floods (EAC, 2011). The Action Plan calls for the region to ensure that adequate information is shared on climate change and how it impacts negatively of farmers. To this end, building climate change adaptation capacity is highlighted as one of the key intervention measures in the agricultural sector. Other measure include developing water strategies and programmes that respond directly to climate change and extreme weather events. Furthermore, the use of improved and/or appropriate technologies and inputs that are adaptive to climate change impacts is recommended.

Five times the EAC Action Plan mentions ‘industry’. This initially comes when the Action Plan considers the constraints in achieving food security in the EAC. The Action Plan indicates that inadequate institutional support to the fishing industry including capture and aquaculture fisheries exists in the region (EAC, 2011). A call is then made for the EAC to have coordinated backbone programmes to accelerate agro-industry development, particularly to reduce post-harvest losses. The ministries of trade and industry and the private sector are then identified as key actors in this space.

Matters of gender are also addressed in the Action Plan with a whole section dedicated to ‘Gender Dimensions in EAC Region Food Security’ (EAC, 2011). In fact, 11 times the document mentions gender and in 20 instances, women are mentioned. The Action Plan acknowledges that in most rural communities of the EAC, women play a critical, central and important role in agriculture ensuring food security at household level. Gender inequalities are picked and these are said to be manifested in “women’s lack of adequate access to health resources; their relatively high unemployment rate in the formal sector as compared to men; as well as their lack of access to credit facilities for investment in income generating activities and self-employment” (Ibid: 19). Other constraints identified include the lack of equal rights to personal status, security, land (except in Rwanda where man and wife own the land) and inheritance.

Gaps in designing and implementing policies in EAC

With respect to design of the policies, the interlinkages between CC-FS-T policies and agroindustry development underscore the need for coherence in policy making in the three areas for sustainable agro-processing development in EAC.

Construction of the institutional policy design structure, particularly the inter-Ministerial Coordination Team, made up of all the stakeholders has remained a challenge both at the regional and national levels. The problem is that policy measures of CC-FS-T and industrialization are often strategized and implemented in their respective ministries at different times but are not integrated, hence, they hardly complement each other. The fact that these policies are so scattered makes it hard for a holistic approach that would ensure sustainability.

The linkages between CC-FS-T and industrialization imply a multidisciplinary approach to policy formulation both at the regional and national levels, involving all the stakeholders: the respective government ministries concerned with climate change, trade, industrialization and food security; interested private sector; and the civil society. Such a participatory approach will promote coherence in addressing climate change, trade, food security and agro-processing issues.

In addition, foreign trade policy, particularly the preferential trade arrangements EAC countries signed with developed countries, has not contributed to the region's exports of agro-processed products and industrial development, as the region has remained largely an exporter of raw agricultural materials. This divergence between policy objectives and real situation in the EAC could be attributed to gaps between formulation of the above policies at the EAC regional level and their implementation at the national level. Another reason is the lack of a collective position on development given that common interests within the region still have to be identified. This also impedes the region from negotiating collectively in the context of trade agreements with other nations.

With respect to implementation, there is limited implementation of strategies, programmes and projects of regional policies at the national level. There is also a gap in compliance with regional policies and strategies, for example there is no EAC Partner State which is allocating at least 10% of its national budget to the agricultural sector in line with CAADP requirements. In addition, financial resource constraints limit implementation of policy strategies and initiatives towards addressing climate change, improving food security and industry development. Besides most of the initiatives, programmes and projects being implemented in the EAC region to enhance trade, address environment, develop industries, combat climate change, and improve food security seem to be donor driven.

Gaps also exist with respect to synchronisation of programmes, action plans and prioritisation of actions in CC-FS-T at the national level. Human resource especially with respect to national ministries also poses implementation challenges, further widening the gap. There is also a lack of effective Monitoring & Evaluation to guide implementation and measure performance especially with respect to national implementation of regional policies.

Implementation at the national level also requires robust and functional government structures, systems, procedures, processes as well as political and institutional will, which may not be fully the case at the moment.

New global sustainable development agenda and Africa Agenda 2063

It will be an incomplete story to talk of EAC agro-industrial development post-2015 without touching on the new Agenda for Sustainable Development (AfSD) to 2030 as well as Africa Agenda 2063. The twin agendas fully embrace the elements of both industries and agro-processing. The AfSD was endorsed by the United Nations in September 2015 and present a detailed set of aspirations to progressively make the world a better place by 2030. The 2030 AfSD, whose battle cry is ‘Let no-one be left behind’ (United Nations, 2015), comes as an expanded agenda from the Millennium Development Goals (MDGs). Informing the AfSD are 17 Goals (Box 3.3) and 169 targets that many nations, including the EAC block have ratified to achieve by 2030.

Box 3.3: Summary SDGs

- ✓ Goal 1: End poverty in all its forms everywhere
- ✓ Goal 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture
- ✓ Goal 3: Ensure healthy lives and promote well-being for all at all ages
- ✓ Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all
- ✓ Goal 5: Achieve gender equality and empower all women and girls
- ✓ Goal 6: Ensure availability and sustainable management of water and sanitation for all
- ✓ Goal 7: Ensure access to affordable, reliable, sustainable and modern energy for all
- ✓ Goal 8: Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all
- ✓ Goal 9: Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation
- ✓ Goal 10: Reduce inequality within and among countries
- ✓ Goal 11: Make cities and human settlements inclusive, safe, resilient and sustainable
- ✓ Goal 12: Ensure sustainable consumption and production patterns
- ✓ Goal 13: Take urgent action to combat climate change and its impacts⁷
- ✓ Goal 14: Conserve and sustainably use the oceans, seas and marine resources for sustainable development
- ✓ Goal 15: Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss

⁷ Acknowledging that the United Nations Framework Convention on Climate Change is the primary international, intergovernmental forum for negotiating the global response to climate change.

- ✓ Goal 16: Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels
- ✓ Goal 17: Strengthen the means of implementation and revitalize the Global Partnership for Sustainable Development

Source: United Nations (2015: 14)

A further analysis of the relevant SDG dealing with industries (SDG 9 “build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation”), reveals details on the set targets to 2030 that the EAC and its stakeholders need to be aware of in order to achieve its set goal. The targets⁸ are listed herein for completeness:

- 9.1: Develop quality, reliable, sustainable and resilient infrastructure, including regional and transborder infrastructure, to support economic development and human well-being, with a focus on affordable and equitable access for all.
- 9.2: Promote inclusive and sustainable industrialization and, by 2030, significantly raise industry’s share of employment and gross domestic product, in line with national circumstances, and double its share in least developed countries.
- 9.3: Increase the access of small-scale industrial and other enterprises, in particular in developing countries, to financial services, including affordable credit, and their integration into value chains and markets.
- 9.4: By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities.
- 9.5: Enhance scientific research, upgrade the technological capabilities of industrial sectors in all countries, in particular developing countries, including, by 2030, encouraging innovation and substantially increasing the number of research and development workers per 1 million people and public and private research and development spending.
- 9.a: Facilitate sustainable and resilient infrastructure development in developing countries through enhanced financial, technological and technical support to African countries, least developed countries, landlocked developing countries and small island developing States.
- 9.b: Support domestic technology development, research and innovation in developing countries, including by ensuring a conducive policy environment for, inter alia, industrial diversification and value addition to commodities.

⁸ Those interested in latest indicators developed by the United Nations Inter-agency and Expert Group on Sustainable Development Goal Indicators (IAEG-SDGs) can follow up from the official website of the IAEG-SDGs available here: <https://unstats.un.org/sdgs/iaeg-sdgs/>

- 9.c: Significantly increase access to information and communications technology and strive to provide universal and affordable access to the Internet in least developed countries by 2020.

On the other hand, SDG 2 relates to agriculture and agro-processing as calls to “End hunger, achieve food security and improved nutrition and promote sustainable agriculture” Targets for these goals by 2030 as quoted from United Nations (2015, pp 14) are to:

- 2.1: By 2030, end hunger and ensure access by all people, in particular the poor and people in vulnerable situations, including infants, to safe, nutritious and sufficient food all year round.
- 2.2: By 2030, end all forms of malnutrition, including achieving, by 2025, the internationally agreed targets on stunting and wasting in children under 5 years of age, and address the nutritional needs of adolescent girls, pregnant and lactating women and older persons.
- 2.3: By 2030, double the agricultural productivity and incomes of small-scale food producers, in particular women, indigenous peoples, family farmers, pastoralists and fishers, including through secure and equal access to land, other productive resources and inputs, knowledge, financial services, markets and opportunities for value addition and non-farm employment.
- 2.4: By 2030, ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters and that progressively improve land and soil quality.
- 2.5: By 2020, maintain the genetic diversity of seeds, cultivated plants and farmed and domesticated animals and their related wild species, including through soundly managed and diversified seed and plant banks at the national, regional and international levels, and promote access to and fair and equitable sharing of benefits arising from the utilization of genetic resources and associated traditional knowledge, as internationally agreed.
- 2.a: Increase investment, including through enhanced international cooperation, in rural infrastructure, agricultural research and extension services, technology development and plant and livestock gene banks in order to enhance agricultural productive capacity in developing countries, in particular least developed countries.
- 2.b: Correct and prevent trade restrictions and distortions in world agricultural markets, including through the parallel elimination of all forms of agricultural export subsidies and all export measures with equivalent effect, in accordance with the mandate of the Doha Development Round.
- 2.c: Adopt measures to ensure the proper functioning of food commodity markets and their derivatives and facilitate timely access to market information, including on food reserves, in order to help limit extreme food price volatility.

Africa's Agenda 2063 draws from the Pan African vision of having a continent that is peaceful and prosperous (African Union Commission, 2014). Furthermore, the Pan African vision envisages more involvement of its citizens in driving its own agenda. To this end, seven aspirations are drawn to 2063 and these are summarised in Box 3.4.

Box 3.4: Africa's Agenda 2063 – aspirations

1. A prosperous Africa based on inclusive growth and sustainable development.
2. An integrated continent; politically united and based on the ideals of Pan Africanism and the vision of Africa's Renaissance.
3. An Africa of good governance, democracy, respect for human rights, justice and the rule of law.
4. A peaceful and secure Africa.
5. An Africa with a strong cultural identity, common heritage, values and ethics.
6. An Africa where development is people-driven, unleashing the potential of its women and youth.
7. Africa as a strong, united and influential global player and partner.

Source: African Union (2014: 2)

From the aspirations, particularly aspiration 1, both industries and agro-processing are concerned with the goal to “eradicate poverty in one generation and build shared prosperity through social and economic transformation of the continent”. The aspirations, therefore, include amongst others to:

- Transform economies by sustainable and inclusive economic growth, Science, Technology and Industry (STI) driven manufacturing, industrialization and value addition, economic diversification and resilience and
- Modernise agriculture for increased production, productivity and value addition as it contributes to national prosperity, the prosperity of farmers and Africa's collective food security.

Overall, the SDGs 9 & 2, the Agenda for Sustainable Development (AfSD) and Africa's Agenda 2063 display linkages between industrialisation (industries) and agro-processing policies as they create an Africa, which achieves food security and sustainable development.

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MODULE 4: SIMULATION EXERCISE

Module Objective ● ● ● ●

The emphasis of this module is to encourage holistic, substantive, collective and pragmatic thinking by the participants that enables them to sharpen skills to interact with institutions at the national, regional and global level platforms dealing with how Uganda policy-makers can take forward processes and procedures leading to a holistic revision of the National Industrial Development Policy.

Learning Outcomes ● ● ● ●

After going through this module, it is anticipated that the participants will be able to apply the knowledge gained from modules 1-3 and be able to contribute meaningfully towards a holistic revision of the National Industrial Development Policy. Such a new policy should be one that significantly mainstream matters of trade, climate change, agriculture & food security and gender.

Workshop participants are anticipated to make concrete suggestions on the policy text through holistic, substantive, collective and pragmatic thinking leading to the development of better skills to interact with national and EAC wide institutions and contribute to policy-making and/or policy-implementation.

Towards Green Industrialisation in Africa

The jury is out! Yes, Africa is moving towards and with the green industrialisation agenda. To this end, the African Union Commission placed an advert in July 2018 calling for a four-member High Level Panel (HLP) of experts to work within the AU Green Innovation Framework (AU-GIF) for the continent. This signals a new era in green industrialisation (Box 4.1).

Box 4.1: Call for Consultancy Job by the African Union (July/August 2018): For the African Union Green Innovation Framework

Realizing the enormous challenges faced by the AU Member States from climate change and other environment related problems and the quest to preserve the carrying

capacity of our environment the green innovation took a centre stage. The African Union Scientific, Technical and Research Commission (AU-STRC) is assembling a High-Level Panel (HLP) of experts within the AU Green Innovation Framework (AU-GIF) for the continent.

The African Union Green Innovation Framework will be a panacea to Sustainable Development as it serves as a catalyst toward renewed development. This framework will guide the Member States in transiting to green economy with the rest of the world, as Africa is left out of the first and second global industrialization era. That saw the advent of various steam engine and machinery invented to improve production and increase efficiency that gave birth to the manufacturing era. As a major turning point in history, almost every aspect of daily life was influenced in some way with high economic gains. The technological breakthrough followed by an exponential increase in innovation in the quest for improvement and growth that saw carbon emission taking a centre stage.

However, the continued release of carbon emissions from plants and machinery into the atmosphere has triggered several negative effects which have depleted the ozone layer, resulting in the most drastic climate change ever experienced in the history of mankind. Therefore, in order to avert the dire consequences looming on Earth's horizon, there is a global transition towards innovation and technological advancement that is eco-friendly and not harmful to the environment.

Consequently, for a harmonized and integrated transition to a green economy, the African Union Green Innovation Framework shall be developed as an effective guide for Member States to adopt in order to achieve sustainable growth and development. This document therefore, outlines the terms of reference for the formation of High Level Panel on the development of AU Green Innovation Framework.

Source: African Union (2018: 1-2)

Group Exercise



In groups of five (5) participants each:

From what you have read and gathered in this training and manual, "What should a holistic revision of the Ugandan National Industrial Development Policy (NIDP) entail, in terms of:

- 1. Agriculture, Agro-processing and Food Security (Group 1)*
- 2. Climate Change (Group 2)*
- 3. Trade (Group 3)*
- 4. Gender (Group 4)*

NB: Your answers must keep in focus matters relating to Industry 4.0.