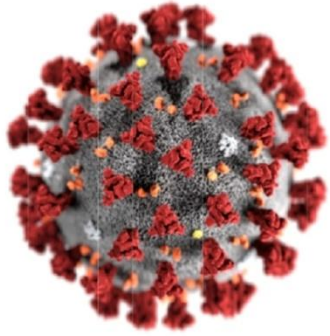
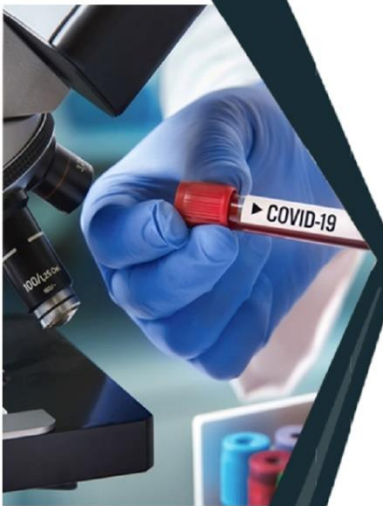




COVID-19



ASRIC Response and Intervention



**Impact of COVID-19 on Africa's
Food and Nutritional Security**

"Actions and Interventions"



Impact of COVID-19 on Africa's Food and Nutritional Security

“Actions and Intervention”

ASRIC Working Group on Food and Nutrition

This report was developed by the members of the six different taskforces / work packages within the ASRIC Working Group on Food and Nutrition. Below is the membership of the taskforces

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TASKFORCE 6 “WORK PACKAGE 6”: Enabling environment “Develop policy brief and policy guidelines to address the current and future (similar) challenges to food and nutrition security (FNS) in Africa through advocacy and sensitization campaigns”.

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The following institutions supported the study and participated actively:



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Preface

The African Scientific Research and Innovation Council developed this book in response to the impact of the Covid-19 pandemic on Africa's Food and Nutrition Security so as to minimize and ensure the wellbeing of Africa's citizens. The ASRIC operating under its mandate as advisory body to the AU Member States, launched the "Working Group to Study the Impact of Covid-19 on Africa's Food and Nutritional Security" that to address the Impact of Covid-19 on Africa's Food and Nutritional Security. This working group addressed six priority areas of intervention and each area of intervention was further developed by a taskforce / work package that composed of the working group members.

The distinctive feature of the book is that it provides a roadmap of the considerations towards a Food and Nutritional Security strategy particularly during pandemics in African Union Member States. This was based on the learning from imperatives and fundamental needs for knowledge based economy that is being propagated by the Science, Technology and Innovation Strategy for Africa (STISA) 2024.

This book is a consolidation of the Taskforces reports which work as a reference for consideration by the AU member states as they develop interventions to minimize the impact on national Food and Nutritional Security. The value of these ideas and actions delivered should be assessed to adapt to individual countries to determine how best to improve lives and wellbeing of the African people.

This book will help Member States in developing national interventions and building robust mechanisms that will respond to Food and Nutritional Security challenges in their countries especially in this period where the scourge arising from the COVID-19 pandemic has left their populace experience shortages of resources. The book can be used as a tool for furthering the intra-Africa research and in collaboration with all the concerned stakeholders and partners.

Acknowledgement

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I. Introduction:

The African Union's Executive Council Decision (EX.CL/Dec.747 (XXII)) established ASRIC as a specialized Technical Advisory Body to the African Union with African Union, Scientific, Technical and Research Commission (AU-STRC) as its Secretariat. The ASRIC promotes scientific research and innovation in order to address the challenges of Africa's socio-economic development. It also mobilizes African research excellence and provides a platform for dialogue among African scientists and serves as a voice of the scientific community in building and sustaining continental research and innovation nexus.

Launching the ASRIC and its Congress in November 2018 was a land mark in the Science, Technology and Innovation impact on Africa's future and prosperity. The ASRIC Congress is composed of African scientists from all the African National Science Academies, National Research Councils, top Science, Technology and Innovations (STI) Institutes in Africa, Diaspora Scientists and Partners. The Congress decides on the implementation of key science and technology programme and projects in accordance with the Science, Technology and Innovation Strategy for Africa (STISA-2024) and the overarching continental framework AU Agenda 2063.

The STISA-2024 is the first of the ten-year incremental phasing strategies to respond to the demand for science, technology and innovation from various impact sectors. The STISA-2024 is built upon four pillars, one of which is **building technical and professional competencies that** are anchored on six distinct priority areas that contribute to the overall development of Africa. One of the priorities is **Eradication of hunger and achieving food security.**

According to the latest Africa's Pulse, the World Bank's biannual economic update for the region, economic growth in Sub-Saharan Africa has been significantly impacted by the ongoing corona virus outbreak. The report forecasts a sharp fall in virtually every aspect of livelihood and the first major recession in the region over the past 25 years. COVID-19 will cost the African region between \$37 and \$79 billion in output losses for 2020 due to a combination of facts like trade and value chain disruptions that impact commodity import and export, reduced foreign exchange and inflows from remittances, tourism, direct foreign investments, foreign aid, capital flight, fragile health systems, environmental pollution and unequal trade balances.

These economic turn-downs of Covid-19 will ignite a food and nutritional security crisis in Africa. According to the Pulse report, agricultural production in the continent is projected to potentially contract between 2.6% in an optimistic scenario up to 7% if there are trade blockages. Food imports would decline substantially reaching 13% to 25% due to higher transactional costs. Other factors including fears of virus contaminated imports and exports as well as importing vessels which might spike resistance by the populace against imports.

The Projection analyses of the effects of Covid-19 on agriculture show that the short-term impact will emanate from containment measures. The widespread of lockdowns have led to massive closure in businesses, loss of jobs and income. This has affected the demand for agricultural produced from rural areas. On the production and supply side, the disruptions have constrained: (i) access to productive inputs (seeds, fertilizers, etc.) including labour; (ii) capacity to transport agricultural inputs and produce from rural areas where production takes place and its distribution to various processing and market centres for sale; and (iii) shortage in labour supply with possible severe postharvest losses, especially for labour-intensive postharvest activities. The demand side, on the other hand, featured panic buying, which created temporary shortages of foodstuffs and price hikes. This increase in demand in the urban centers is the short-term reaction to the lockdown. Also, gluts in rural areas where production takes place and have no agro-based processing facilities are likely to occur in the short run due to disruptions in transport, logistics and retail outlets.

In light of the above mentioned and building on ASRIC's mandate as advisory body to the AU and its Member States, the onus lies on ASRIC, to respond to these challenges among the other ones identified under the ASRIC statement on Covid-19, dated 27th April 2020. The ASRIC launched a working group that to address the **Impact of Covid-19 on Africa's Food and Nutritional Security.**

The call was responded widely by several sister organizations, African Academies of Sciences Universities and Research Institutions along with African individual scientists.

This working group is a part of widely respond set in place by ASRIC where the following Advisory board and working groups was established; not only that but a large number of taskforces in different sectorial areas were gathered to attain to different tasks and challenges. The working groups are: ASRIC Advisory Board on STI Intervention for Covid-19; Working Group to Study the Impact of Covid-19 on Africa's Food and Nutritional Security; Working Group to Study the Socioeconomic Impact of Covid-19 on Africa; and Working Group on Africa's Indigenous Knowledge to Preventing and Controlling Emerging Infectious Diseases on the Continent like Covid-19: Utilizing an Afro-centric Response.

The objective of this working group “Working Group to Study the Impact of Covid-19 on Africa’s Food and Nutritional Security” is to develop a guided response that will minimize the impact of Covid-19 on Africa’s Food and Nutrition Security in order to ensure the wellbeing of Africa’s citizens. By the establishment of the working group several meetings took place to revamp the working group mandate and to put in place relevant actions/intervention to the Covid-19 pandemic and beyond. It was agreed by the working group members to have 6 priority areas (work packages) of intervention and these areas to be developed further by 6 taskforces that composed of the working group members with the possibility to integrate more members when the need arise.

The working group mandate is to:

- a- Develop a situational analysis on the food and nutritional security in Africa in light of the Covid-19 pandemic.
- b- Develop a guideline to assist Member States in developing their own regulation on transport/shipment of foods and Agro-products i.e. (in country movement and transboundary movement) in light of the Covid-19 pandemic.
- c- Examining the consequences of Covid-19 by critically examining crop yields, Agro safety, nutrition, food security, plant improvement programmes, environmental pollution and impact on less fortunate vulnerable members of society and proffering solutions to overcome these impacts and estimated cost of the proffered interventions.
- d- Examine the possibilities and the way that Covid-19 may present any opportunity for our continent to domesticate the economy through promotion of local production, value addition and processing, regional trade thus reducing foreign domination and reliance on imports.
- e- Identify research gaps/opportunities to strengthen the continent’s capacity to respond to future threats to Food and Nutrition Security.
- f- Develop policy brief and policy guidelines to address the current and future (similar) challenges to food and nutrition security in Africa.



This document is an accumulating report of the Taskforces reports to guide the work of the working group as well as it could be considered as a reference by the AU member states when they are developing national intervention to element the Covid-19 impact on national (Africa's) Food and Nutritional Security.

WORK PACKAGE 1

“TASKFORCE 1”

Food and nutrition security in light of Covid-19 pandemic and Beyond

“Situational analysis on the food and nutritional security in Africa”

I. Taskforce 1:

This report was developed by the members of the taskforce on the situational analysis on the Status of Food and Nutrition Security in Africa Under Covid-19 Pandemic, describing the intervention and action to be taken and elaborates on the tools to be taken by the taskforce to achieve its mandate.

II.1. Problem statement:

The challenges of Africa’s food and nutrition security remain high, with more than 60% of the continent’s population living below the US1.25 per day poverty line. The COVID19 pandemic has further worsened food scarcity, potentially exposing millions to hunger especially the rural poor and other vulnerable populations in Sub-Saharan Africa. Unfortunately, COVID-19 treats its victims unequally. Poor and nutritionally vulnerable population, whose immune system may already be weak, are stand a greater risk of suffering the consequences of the disease. As the world continues to grapple with the devastating consequences of the virus on health system and wellbeing, there are indications that the pandemic may exacerbate the poor nutritional status of many vulnerable groups in Africa, where one in nine people already lacks adequate food and nutrition to lead healthy and productive life and 20% are already undernourished. Thus, the challenge of meeting the food and nutrition target, within a period in which African population is expected to double, has now been complicated by the devastating effect of Covid pandemic. When countries eventually open after lockdown, consumption and production patterns will likely be further stretched. This will also increase pressure on already scarce natural resources even as climate change continues to exert environmental pressure. In addition, COVID19 will further worsen hidden hunger across Africa, where 63% of children under 5 years are already anemic and 26% of Africa’s population is at risk of becoming zinc deficient.

Most of the interventions required to enable Africa achieve food and nutrition security through improved food production and livelihoods, are known. However, to fully understand the impact of Covid-19 of Africa’s food and nutrition security, a detailed situation analysis that takes into consideration, the various shocks and nutritional vulnerabilities created by the pandemic is necessary. Beyond increases in agricultural productivity and reduction of food losses and food waste, enabling environment that promotes inclusive food availability and access is pertinent.

Understanding the severity and prevalence of poor nutrition, number of affected individuals and coping measures being implemented by communities are critical towards designing and implementing holistic interventions to mitigate the effects of Covid-19 on food and nutrition security. This is pertinent especially in conflict affected areas, where refugees and unsheltered are most vulnerable parts of Africa. Interventions to facilitate the strengthening of safety nets and resilience to food security among vulnerable will rely on the conduct of a study of this nature.

II.2. Mandate:

The mandate of this taskforce is to develop a situational analysis on the food and nutritional security in Africa in light of the Covid-19 pandemic along with the needed areas of intervention to post the Africa’s food and nutritional security in this pandemic and beyond.

II.3. Interventions and actions:

The interventions/actions proposed in this work package (table 1) include: i) a survey on the current severity and prevalence of food and nutrition security in AU member States in light of Covid-19 covering an analysis of the food and nutrition security of individuals disaggregated by gender and age and a review of the coping measures being implemented by communities to mitigate the effects of Covid-19 on food and nutrition security; ii) development of scenario map on the evolution of food and nutrition in Africa currently and Post Covid-19; and iii) identification of relevant areas of intervention for food and nutrition security in light of Covid-19 pandemic.

SNo	Intervention	Action
1	Development of scenario map on the evolution of food and nutrition in Africa currently and Post Covid-19	<ul style="list-style-type: none"> - desktop study on the current severity and prevalence of food and nutrition security in AU member States in light of Covid-19. - review of the coping measures being implemented by communities to mitigate the effects of Covid-19 on food and nutrition security
2	Regulatory frameworks/guideline on resilience and managing foods and Agro-products in times of Covid-19 and/or any future pandemic	<ul style="list-style-type: none"> - Identification of relevant areas of intervention for food and nutrition security in light of Covid-19 pandemic - Development of a guide/recommendation that would help in policy and legal frameworks for management of food and nutrition security issues in Covid-19 pandemic or any other form of pandemic.
3	Capacity building and Regional Harmonization	<ul style="list-style-type: none"> - Strengthening capacity to respond to food and nutrition security vulnerabilities created by Covid-19 pandemic - Harmonizing of Member States interventions for food and nutrition security in light of Covid-19 pandemic;

Table 1. interventions/ actions proposed
“Food and nutrition security in light of Covid-19 pandemic and Beyond”

II.4. Outcome:

The overall outcome of these interventions is a framework that to offer AU members States a deeper understanding of the impact of Covid-19 on food and nutrition security through a science-led process that presents evidence on critical components on nutrition while addressing coping measures and supporting mechanisms for the implementation of holistic interventions to mitigate the effects of Covid-19 and/or any new pandemic on Africa’s food and nutrition security.

TASKFORCE 2 WORK PACKAGE 2

Identification and review of guidelines for in-country and trans-boundary movements of food and Agro-products

II. Taskforce 2

This report was developed by the members of the taskforce on the identification and review of guidelines for in-country and trans-boundary movements of food and Agro-products, under Covid-19 Pandemic, describing the intervention and action to be taken. This is also to elaborate on the tools and actions to be taken by the taskforce to achieve its mandate.

III.1. Problem statement:

The outbreak of COVID-19 has brought with it several challenges relating to food and nutritional security in Africa. Despite the number of those who have tested positive to COVID-19 in Africa being far less than those in other parts of the globe, COVID-19 is directly and indirectly impacting lives and livelihoods every day on the continent. As a way of coping with foreseen and unforeseen impacts of the COVID-19 pandemic, Member States have instituted several measures to try and deal with both short and long-term effects resulting from the pandemic.

Lockdowns of towns and cities has led to the inaccessibility of markets; this also stems from limited transportation leading to delays in getting farm produce to markets on time. Increased food prices and decreased farmers' profits are imminent. Food spoilage is also imminent as farm produce cannot be purchased on time and dispatched to major towns and outlets where it is greatly needed. Cancellation of flights, closure of entry/exit points across several airports and ports in Member States has resulted in a major reduction of shipment of consignments of fresh produce as well as caused losses to exporters. The result is reduced income from exports for Member States that rely heavily on foreign exchange from fresh produce exports hence drastically affecting economies. The ripple effect is job losses at the multinational and national horticultural and floricultural production sites. Landlocked Member States are also bearing the brunt of this imposed lockdowns and border closures as delays in cross border clearance of vehicles transporting Agro-products has an impact on timely accessibility, quality and pricing of food.

The manner in which food is transported within the Member States and across borders within the regions as well as outside of the region requires regularization in this covid-19 period as well as post covid-19. This is also to take into consideration that foods and Agro-products fall into various categories, with a large proportion of these being fast moving consumer goods that are also perishable or have a limited shelf-life.

III.2. Mandate:

The mandate of Taskforce 2 is to "Develop a guideline to assist Member States in developing their own regulation on transport/shipment of foods and Agro-products i.e. (in country movement and trans-boundary movement) in light of the Covid-19 pandemic."

III.3. Interventions and actions:

The proposed interventions/actions in this work-package are presented in table (2) include:

1. Conduct a survey/s in Member States to determine the current regulations on transport/ shipment of foods and Agro-products and the impact that these regulations or the lack of them on Africa's food and nutritional security in light of Covid-19
2. Determine the level of effectiveness of the regulations in place across the regions and determine a method of harmonizing to ensure food safety in the Covid-19 period and beyond
3. Bench-mark the guidelines that are already in existence in Member States and assist countries to review and/or develop their own guidelines for in-country and trans-boundary movement of food and Agro-products during the Covid-19 period as well as post covid-19.

SNo	Intervention	Action
1	Regulations on transport/ shipment of foods and Agro-products (AU regulation on transport/ shipment of foods and Agro-products)	<p>1- Situational analyses on national regulations.</p> <ul style="list-style-type: none"> • Assessment of presence or absence of country regulations on transport/ shipment of foods and Agro-products • Conduct a survey/s in Member States to determine the current regulations on transport/ shipment of foods and Agro-products • Assess the impact of regulations or the lack of them on Africa’s food and nutritional security in light of Covid-19 <p>2- Effective/ Effectiveness of regulations in place across the Continent</p> <ul style="list-style-type: none"> • Risk assessment of movement of Agro-food products in the concept of sanitary and phytosanitary standards. • Assessment of turnaround time during trans-boundary clearance, the accessibility of cleared Agro-food products. • Determine the level of effectiveness of the regulations in place across the regions • Determine a method of harmonizing regulations and guidelines to ensure food safety in the Covid-19 period and beyond <p>3- Bench-marking of guidelines</p> <ul style="list-style-type: none"> • Bench-mark the guidelines that are already in existence in Member States and assist countries to review and/or develop their own guidelines for in-country and transboundary movement of food and Agro-products during the Covid-19 period as well as post Covid-19 • Assessment of existence or absence of guidelines in the member states • Periodic reviews of guidelines and regulations to assess effectiveness <p>4- Development of the following Protocols and Guidelines: Livestock Markets; Fresh Produce Handling Facilities; Food Transporters; National Police Service and National Government Administration Officials; Traders & Operationalization of Food Supply Chain Markets; Farmers and Farmers’ Organizations; Input Suppliers and Agro-vets.</p>
2	Capacity Building to Member States	Virtual convening of meetings to develop the capacity of the target groups on the regulations.

Table 2: interventions/actions “country and trans-boundary movements of food and Agro-products” during the pandemic and beyond

III.4. Outcome:

Development of such guideline “AU regulation on transport/ shipment of foods and Agro-products” will assist Member States in developing their own regulation, the successful implementation requires stakeholder’s engagement at all levels as such a comprehensive capacity building programmes will be developed and conducted.

TASKFORCE 3

WORK PACKAGE 3

Mitigating the Impact of COVID-19 Pandemic on Components of Africa's Food Systems

“Examining the consequences of Covid-19 Africa's Food systems”

III. Taskforce 3:

The Taskforce hereafter is reporting on the action and intervention that to be taken to mitigate the impact of Covid-19 on crop yields, livestock system, animal feed resource availability, Agro-safety, nutrition, food security, plant and animal improvement programmes, environmental pollution and impact on less fortunate vulnerable.

IV.1. Problem statement:

Covid-19 pandemic represents a risk that can exacerbate chronic or acute hunger and malnourishment arising from breaks in food supply chains, food shortages and food price spikes, while possibly distracting governments from actively responding to established threats like insurgency and climate change. In Africa, where most countries struggle to manage resources to contain the crisis, the long-term strategic plan of achieving development goals (CAADP & SDGs), may be compromised at various levels, cascading into unintended negligence of clear and existing threats to food and nutrition security. For example, the first quarter of 2020 saw the number of malnourished people rising due to conflicts and climate change particularly in Sahel region. The ongoing threat to the food system that has been posed by desert locusts remains real as swarms have been projected to grow 500-fold by June 2020. Responding to the threats posed by Covid-19 pandemic on Africa's food system requires forward-thinking and collective intelligence gathering process to assess and explore response scenarios in agricultural innovation system.

With the imposition of lockdown across the continent, millions of traders and craftsmen, who mainly rely on the informal sector, are compelled to stay home with no savings. In total, these account for 85% of employment across the continent. There is thus the need to assess the impact of this pandemic on specific components of food system by way of horizon scanning that allows for intelligence gathering, leveraging on evidence for informed decision making.

In furtherance, restriction in movement of persons and goods is one such measure. This has the potential of leading to small-holder farmers and producers not being able to freely tend to their crops, farms and livestock as they desire. The quality of crop production and farming is compromised leading to reduction in crop outputs and unprecedented yield losses.

IV.2. Mandate:

The mandate of the Task force 3 is to review the consequences of Covid-19 by critically examining crop yields, livestock system, animal feed resource availability, Agro-safety, nutrition, food security, plant and animal improvement programmes, environmental pollution and impact on less fortunate vulnerable.

IV.3. Interventions and actions:

The mandate of this task force entails the development of a frame work on Mitigating the Impact of COVID-19 Pandemic on Components of Africa's food System. The interventions proposed here will devote particular emphasis to Crop productivity & yields, feed crop, pastures and range vegetation yield, Food regulation & safety, Post-harvest management, Food aggregation & distribution and Market. Various foresight methodologies will be employed for rapid collective intelligence gathering process on emerging impacts and response (table 3).

SNo	Intervention	Action
1	Frame work on Mitigating the Impact of COVID-19 Pandemic on Components of Africa's food Systems	<p>1- Investigate Crop productivity & yields, forage and fodder crops and animal productivity:</p> <ul style="list-style-type: none"> • Obtain Crop Forecast data from national Ministry of Agriculture • Interview NARS Director • Conduct internet search of FAO and other sites for information on global/local forecasts/performance • Interview national Farmers Union, livestock and fisheries owners • Interview lead researchers at universities and research institutes • Undertake spot field survey within selected farming block • Virtual and physical meetings using foresight analysis <p>2- Food regulation & safety Conduct information search on existing policies, as well as actions introduced during Covid-19:</p> <ul style="list-style-type: none"> • Compile information on handling of feed, animals and their products. • Compile information on Animal health and safety • Interview national regulator • Interview National Food Nutrition Commission • Interview National Bureau of Standards • Interview Consumer Protection Commission • Interview leading supermarkets, as well as smaller shops • Virtual and physical meetings using foresight analysis • Interview Customs/Revenue Authority <p>3- Post-harvest management</p> <ul style="list-style-type: none"> • Interview Ministry of Agriculture/national agriculture research institution • Interview national Food Reserve Agency • Undertake field survey of some relevant value-chain nodes, as well as farms • Virtual and physical meetings using foresight analysis • Assessment of Grains, forage and fodder crops (including cereals and pulses): <p>4- Food and feed aggregation & distribution</p> <ul style="list-style-type: none"> • Interview farmer cooperatives • Interview national Food Reserve Agency • Interview chain supermarkets, as well as distributors • Visit markets and interact with middlemen and traders/marketeers • Virtual and physical meetings using foresight analysis <p>5- Market</p> <ul style="list-style-type: none"> • Visit markets and interact with middlemen and traders/marketeers • Visit chain stores/supermarkets, as well as neighborhood • Virtual and physical meetings using foresight analysis shops • Review of Functional structured markets for feeds, animals and products

Table 3: Interventions/actions “Examining the Impact of COVID-19 Pandemic on Components of Africa’s food Systems”

IV.4. Outcome:

The overall outcome of this taskforce is a framework “frame work on Mitigating the Impact of COVID-19 Pandemic on Components of Africa’s food System” that amid at strengthen AU members States’ response to shocks and vulnerabilities created by the Covid-19 pandemic particularly on Agro-food system, crop yields, animal feed resource availability, Agro-safety, nutrition, food security, plant and animal improvement programmes, environmental pollution and impact on less fortunate vulnerable.

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TASK FORCE 4 WORK PACKAGE 4

Promotion and Domestication of Agribusiness and Product Development Opportunities in the realm of STI.

IV. Taskforce 4:

Is Covid-19 can be considered as a game changer and it could be opportunity for our continent to domesticate the economy through promotion of local production, value addition and processing, regional trade thus reducing foreign domination and reliance on imports, this is the output expected from this taskforce. i.e. it is the taskforce to change the challenge into opportunity.

V.1.Problem statement:

Despite its vast agricultural potential, Africa remains a net importer of food and other agricultural products. This situation is attributed to the rapid population growth, low and stagnating agricultural productivity, policy distortions, weak institutions and poor infrastructure. Performance of Africa in agricultural trade globally and regional is dismal, representing less than 5% of the global volumes of imports and exports. It is also noteworthy that raw materials constitute most of the exports from Africa while at the same time, African countries import the processed version of the food they produce and export as raw (non-processed). As a result, food importation is not only a major foreign exchange burden on African economies, but it presents lost opportunities for agro-industrialization. One key factor that separates under-developed and developed/industrialized countries of the world is the extent of agro-processing and value-added food and other agro-based products.

In industrialized countries, agro-processing is a major component of the economy as an instrument for improved food availability, stability, access and socio-economic development. In addition, the development of the agriculture sector provides an opportunity for engagement of youth in agriculture; by 2035 375 million young people are anticipated to reach working age on the continent and agriculture can provide meaningful and decent employment to this growing youth population. Transformation in Africa's agriculture will happen only when technology gets to the end users/ grassroot. A more in-depth application of science technology and innovation is therefore imperative, and this will be achieved through strengthening capacity to respond to emerging and future threats to food supply, trade, industry and markets such as the current pandemic of Covid-19. Noting that agricultural transformation is a process that leads to higher productivity on farms, commercially orients farming, and strengthens the link between farming and other sectors of the economy.

There are many technologies and innovations from research whose application could spur the much-desired transformation of agricultural value chains from production to markets and marketing. However, many research products remain largely underutilized due to various barriers. Commercialization of agricultural research products will allow for the full development of agricultural value chains in Africa, in turn producing more agriculture-related jobs for Africa's increasing youth population. Moreover, adopting the innovation to impact pathway approach would make agricultural value-chain activities such as processing and exports more profitable.

V.2.Mandate:

The mandate of this Task Force is to assess the agricultural market systems in order to strengthen the institutional capacity of stakeholders, to respond to emerging and future threats to food supply, industry, trade, labour, policy and agricultural markets.

The taskforce will also identify local technologies and innovations that can be applied to address food system challenges from production, preservation, storage, Agro-processing and market in selected agricultural value chains. Application of appropriate technologies and innovations can spur the desired transformation in

agricultural value chain, thereby enhancing productivity, increase trade (intra-Africa and global) and reduce the high dependency of food imports.

This presents opportunities to show evidence of how science is contributing to agribusiness development in Africa, as well as develop immediate and realistic frameworks and action plans predicated on the demands created by the Covid-19 pandemic, to drive inclusive and sustainable economic transformation.

V.3. Interventions and actions:

The interventions proposed in this Taskforce (Table 4) will mainly involve mapping out the institutions driving agricultural markets, food systems and trade in Africa's AR4D landscape. This entails an assessment of capacity strengthening needs and Agri-preneurship opportunities that can trigger industrialization. The assessment will provide recommendations for the development of a framework that will guide agribusiness country action plans while taking into consideration a possible market systems approach that will lead to rapid technology adoption by the end users.

Table 4: Proposed interventions and actions

SNo	Intervention	Action
1	Development of African compendium on Africa's based Agro-technologies.	<p>Conducting an audit foreign technology:</p> <ul style="list-style-type: none"> • Develop a tool for foreign technology audit. This includes technologies used in production, food preservation and agro-processing - focus on regional priority value chains • Conduct the technology audit targeting various actors (regional) in the priority value chains • Review of policies on foreign technologies importation for local industries (production, storage, quality preservation, value addition etc.) <p>Conducting an audit of local technologies:</p> <ul style="list-style-type: none"> • Develop a tool for local technology audit. This includes technologies used in production, postharvest storage/preservation, agro-processing in regional priority value chains; • Conduct the technology audit targeting various actors (regional) in the priority value chains: Desk reviews, field surveys, key informant interviews; • Identify technologies and innovations at various stages – ideation, prototypes due for field testing, market-ready and available in the market; • Design strategies for addressing capacity gaps and strengthening collective efforts of institutions and national systems; • Design strategies for addressing the barriers to technology adoption; • Design strategies to exploit opportunities in technology adoption for young, women and other special groups; • Design strategies for uptake and/or commercialization of underutilized plant and animal products; • Design strategies to address barriers while exploiting opportunities for intra-Africa trade and niche markets for technologies/innovation and products
	Development of study on the “key drivers of Africa's food systems”	<ul style="list-style-type: none"> • Develop a template for a mapping exercise on the key institutions, organizations, companies, co-operations etc. that are driving the agricultural food markets, gender frameworks, trade and

2		regulations <ul style="list-style-type: none"> • Carry out a mapping exercise • Gather data on market systems of key agricultural value chains, especially the African staples, which have a high potential as raw material for agro-industries and can boost farmer income.
3	Development of “R&D framework on Agro-business posting” the <i>framework is to guide countries to draft their Agribusiness action plans taking into consideration potential for cross-border trading that can trigger industrialization at national, regional and continental levels. On the other hand, the framework will be informed by item 1 and 2 in this intervention plan</i>	Assessment of Agro-business <ul style="list-style-type: none"> • Review existing agribusiness action plans • Identify missing links between scientific research, incubation, and commercialization of scalable technologies and products. <hr/> Assessment for capacity strengthening and gender mainstreaming <ul style="list-style-type: none"> • Carry out a desk review to analyze agricultural markets and gender dynamics that can fast track commercialization of agricultural research products and technology adoption, • Develop an assessment criterion for the identification of capacity needs • Carry out a capacity needs assessment of institutions, regulatory frameworks, gender and youth initiatives, private sector engagement, incentives for innovation etc Design strategies for addressing capacity gaps and strengthening collective efforts of institutions and national systems

Table 4: Interventions/actions “Promotion and Domestication of Agribusiness and Product Development Opportunities in the realm of STI.”

V.4. Outcome:

The overall outcome is to strengthen Africa’s agricultural market system so as to trigger industrialization in the sector. To achieve this the taskforce This will include the development of African compendium on Africa’s based agro-technologies to promote the utilization of Africa’s based technologies to boost argo industry sector in Africa. This compendium will be updated regularly. The identification of key drivers in the agricultural market place an assessment of capacity needs to provide recommendations on strengthening of the continent’s capacity to respond to current COVID-19 pandemic and future threats to food supply and trade options. The activities of this Task Force will be used to develop a framework on R&D on agro-business specific region and country agribusiness to contribute to the promotion and domestication of Agribusiness and product development opportunities.

TASKFORCE 5 WORK PACKAGE 5

Capacity Audit on Continental Research and Training Responsiveness to Uncertainties in Food, Nutrition Security and Sustainable Agriculture

V. Taskforce 5:

The taskforce is to focused and study Capacity Audit on Continental Research and Training Responsiveness to Uncertainties in Food, Nutrition Security and Sustainable Agriculture

VI.1. Problem Statement:

To alleviate food and nutrition challenges in Africa exacerbated by the COVID-19 Pandemic and beyond, we need to strengthen capacities in the continent's Agricultural Innovation Systems (AIS). This will also help to achieve the Comprehensive Africa Agriculture Development Programme (CAADP), Science, and Technology Innovation Strategy for Africa (STISA-2024) targets. A critical step in this respect is the establishment and sustainable consolidation of Africa's capacity needs in a process that ensures continuous assessment of needs and weaknesses. Capacity audits will help African Union (AU) Member States to manage tailor-made holistic capacity initiatives and mainstream science into national investment plans enabling them to address food and nutrition security beyond the COVID-19 pandemic. Audits of skilled personnel and facilities needs be conducted in National Agricultural Research Institutes (NARIs), Universities, and other research organisations in Africa, which are tasked to generate solutions for improving nutrition and food security. Africa's agri-competencies must be appropriately complemented and consolidated with matching of skills and facilities to meet the needs of the enterprises and labor markets. This would enable workers and enterprises to adjust to changes in technology and markets arising from shocks created by the present Pandemic, while anticipating and preparing for the skills needs of the future. Intelligence gathering through systematic capacity audit in training institutions, universities, Technical Vocational Education and Training Institutions (TVETs) and research institutions will lead to identification of gaps to address food and nutrition security resilience and create inclusive agri-competency poles for agribusiness development, while supporting national efforts for implementing realistic reforms and transformation in response to COVID-19.

VI.2. Mandate:

The mandate of this Taskforce is to identify research gaps and opportunities that will allow for the strengthening of the continent's capacity to respond to future threats to food and nutrition security. This entails a systematic capacity audit that identifies gaps in the continent's nutrition-sensitive Agricultural Innovation Systems (AIS) and institutions. The audit will outline opportunities that may be harnessed to strengthen the capacity for implementing realistic reforms predicated on the demands created by COVID-19 Pandemic, to drive inclusive and sustainable economic transformation.

VI.3. Interventions and actions:

The interventions proposed in this Task Force (Table 1) will mainly involve conducting capacity audit in training institutions, universities, TVETs and research institutions to identify gaps for addressing food and nutrition security leading to the creation of inclusive agri-competency poles. This entails assessment of existing curricula and facilities to identify gaps and develop a capacity action plan for addressing the gaps. With the capacity audit, frameworks can be developed that take into consideration neglected traditional foods, reference laboratories, research units and specific training programmes for food quality and safety in response to the challenges of food and nutrition security at country levels.

Table 5: Intervention and Actions

SNo	Intervention	Actions
1	Situational analysis report on Capacity Audit in Agriculture Food and Nutrition Security Education	<p>Capacity Audit in Universities and TVETs to identify training gaps to address Food and Nutrition Security:</p> <ul style="list-style-type: none"> - Assess existing curricula and facilities in Universities and TVETs - Identify gaps in Curricula with respect to nutrition sensitive agriculture, ICT incorporation, eLearning and Agriculture-Nutrition Linkages and One Health. - Design strategies for addressing capacity gaps - Propose economically feasible, environmentally and socially acceptable recommendations for enhancing community engagement
2	Situational analysis report on Africa’s Research Capacity	<p>Capacity Audit in Universities and National Agricultural Research Systems to identify research gaps to address Food and Nutrition Security</p> <ul style="list-style-type: none"> - Identify challenges in the promotion and characterization of underutilized/neglected traditional foods - Develop a food composition table for underutilized/neglected foods - Conduct economic and social appraisal of the selected foods - Assess existing laboratories and human capacity - Establish reference laboratories for food quality and safety - Identify missing links between communities and research on food and nutrition security - Review existing research agenda in various countries for food and nutrition security
3	Capacity Action Plan and Agri-competencies in the realm of STI	<ul style="list-style-type: none"> - Data from capacities audit in 1 and 2 - Gather data on nutrition relevant human capital formation for updating e-capacities platform. - Develop and adopt systemic classification to accompany a knowledge-base on capacity in food and nutrition security - Recommend skills and competencies required at operational and field level to confront COVID-19 and other uncertainties. - Identify areas of intervention in policy at regional and country levels
4	Agro- capacity building platform	Data from the capacities audit in 1 and 2 along with the capacity action plan (3) will be pooled to build a competency library for selected value chains, which will feed into the eCapacities™ platform

Table 5: Interventions/actions “Capacity Audit on Continental Research and Training Responsiveness to Uncertainties in Food, Nutrition Security and Sustainable Agriculture.”

VI.4. Outcome:

The mandate of this Task Force is to identify research gaps and opportunities that will allow for the strengthening of the continent’s capacity to respond to current Covid-19 Pandemic and future threats to food and nutrition security. The capacity audit arising from the activities of this Task Force will be used to develop

specific region and country capacity action plans and contribute to the enhancement of eCapacities™ platform for training and research in Food Nutrition Security and Sustainable Agriculture.

TASKFORCE 6 WORK PACKAGE 6

Enabling environment

“Develop policy briefs and policy guidelines to address the current and future (similar) challenges to food and nutrition security (FNS) in Africa for advocacy and sensitization campaigns”

VI. Taskforce 6:

This taskforce is to lead all the other taskforces to in the production of policy documents and also to ensure all the outcome/output of other taskforces are disseminated to the relevant bodies inform of policy briefs. These policy briefs will be used to advocate and sensitize relevant stakeholders on issues that require policy actions with respect to food and nutritional security on the continent.

VII.1. Problem statement:

The COVID-19 pandemic has changed the way we do things. There has been changes in policy directions and investments priorities in science, technology and innovation with bigger emphasis on health. With respect to food and nutrition security, there has been barriers to imports due to lockdowns implemented by various government agencies. Some countries have closed their borders (air, land and sea) and this has affected the African Continental Free Trade Agreement (AfCFTA). The cost of food has also skyrocketed leading to scarcity of nutritious food in some countries. It becomes imperative to also have the new normal with regards to national, regional and continental policies that will support FNS during the COVID-19 era. Restriction in movement of persons and goods is one such measure. This has the potential of leading to small-holder farmers and producers not being able to freely tend to their crops, farms and livestock as they desire. The quality of crop production and farming is compromised leading to reduction in crop outputs and unprecedented yield losses. Lockdowns of towns and cities has led to the inaccessibility of markets; this also stems from limited transportation leading to delays in getting farm produce to markets on time. Increased food prices and decreased farmers' profits are imminent. Food spoilage is also imminent as farm produce cannot be purchased on time and dispatched to major towns and outlets where it is greatly needed. Cancellation of flights, closure of entry/exit points across several airports and ports in Member States has resulted in a major reduction of shipment of consignments of fresh produce as well as caused losses to exporters. The result is reduced income from exports for Member States that rely heavily on foreign exchange from fresh produce exports hence drastically affecting economies. The ripple effect is job losses at the multinational and national horticultural and floricultural production sites. Landlocked Member States are also bearing the brunt of this imposed lockdowns and border closures as delays in cross border clearance of vehicles transporting agro-products has an impact on timely accessibility, quality and pricing of food. The manner in which food is transported within the Member States and across borders within the region as well as outside of the region requires regularization in this covid-19 period as well as post covid-19. Hence this Taskforce which aims to ensure that policies and strategies are in place in order to achieve the desired food and nutrition security in Africa. This objective will be achieved by examining the existing policies to ascertain the statuses, what works (successes), what does not work (failures) and why (reasons for successes and or failures).

VII.2. Mandate:

The mandate of this taskforce entails developing policy briefs and guidelines to minimize the impact of Covid-19 on Africa's Food and Nutrition Security (FNS) in order to ensure the wellbeing of Africa's citizens. This task will develop policy brief template and policy guidelines to address the current and future (similar) challenges to

food and nutrition security in Africa especially in the COVID-19 era. In order to effectively achieve this, the working group will develop a strategy that will provide interventions and actions required. Stakeholder analysis, Policy and Institutional landscape study on FNS will be conducted. A stakeholder engagement structure will also be developed to ensure participation and commitment by all stakeholders in the quadruple helix – policymakers, researchers, private sector actors and the civil society actors.

VII.3. Interventions and actions:

The proposed interventions in this work-package (taskforce) include:

SNo	Intervention	Action
1	Commission a policy and institutional landscape study on FNS during and post Covid-19 pandemic to understand what works (successes), what doesn't (failures) and why (reasons for the successes or failures).	Mapping out stakeholders in the Member States and at the regional and continental levels (details contacts and focal persons). <ul style="list-style-type: none"> • Direct communication with Member States (note verbal or email) • Web search and others.
		Conducting a policy and institutional landscape analysis to: <ul style="list-style-type: none"> • Identify policies, strategies and projects that relate to FNS in the AU-Member States. Institutions that play various roles in the sector will also be identified through desk research. • Key stakeholders will be consulted through Key Informant Interviews (KIIs) and Focus Group Discussions (FGDs)
		Development of report on the Policy and institutional landscape in the AU Member States in relation to the working group mandate
2	Policy sensitization and advocacy	Development of sensitization and advocacy strategies for influencing desired policy and institutional changes using appropriate tools such as the policy briefs.
		Development of capacity building programme in relevant areas of interest of the working group
3	Support the development of policy brief and other documents that to come out from other taskforces	Development of Guidelines for the development of policy briefs across all Work Packages (taskforces) to ensure uniformity across the work packages outputs. Providing oversight for the development of standard policy briefs from the other work packages that is focused and conform with standards of communicating a message to the policy makers on the desired change in the sector.

VII.4. Outcomes:

There are three key outcomes from the intervention of this taskforce. Firstly, it will be possible to understand the key gaps in policies and institutions responsible for food and nutritional security in Africa at the national, regional and continental levels and then be able to address these gaps accordingly. This will ensure that suitable programmes are developed and implemented to sustain FNS in Africa. Secondly, through the stakeholder mapping and analysis study, it will be possible to identify the key actors driving the FNS sector at the national, regional and continental levels with a view to understanding their roles, linkages, power and influence. With this information, it will be possible to effectively mount appropriate intervention programmes (such as capacity building, empowerment, training, etc.) for specific stakeholder categories as may be required so as to achieve sustainability of the FNS in Africa. Finally, the oversight support to the other Task forces will empower them to use appropriate tools (policy brief) to influence policy change in other areas where there are gaps so as to adequately address the societal challenges in the area of FNS in Africa.

VII.Way forward and Conclusion

The need for the engagement of the stakeholders in the development and implementation of these interventions is a must to ensure their participating in the outcomes development and ultimately to ensure that Africa' s achieves its food and nutrition security. As such each taskforce identified carefully its stakeholders through intensive consultation and accordingly, they were grouped in internal and external stakeholders, in addition to that a strategic engagement actions were developed and set in place.

On the other hand, cellful development of questioners and surveys and analysis of the output will lead to an informed output that will results in a trust worthy output, as of that the taskforces are encouraged to develop a comprehensive questioners and surveys and to ensure that it well received by the desired target groups and that the responses are statistically and strategically analyzed.

Quick wins and short-term outputs will attract more resources (financial and human) to support the working group. As such, each taskforce is to develop detailed action plan and to identify short- and long-term achievements.

The need to recruiter extra hands may arise and the secretariat along with other members of the working group need to anticipate this and to be ready for it.