E

联合国粮食及农业组织 | Food and Agriculture Organization of the United Nations | Organisation des Nations Unies pour l'alimentation et l'agriculture | Продовольственная и сельскохозяйственная организация Объединенных Наций | Organización de las Naciones Unidas para la Alimentación y la Agricultura | منظمة الأغذية والزراعة للأمم المتحدة

FAO Regional Conference for Africa

Thirty-first Session

Victoria Falls, Zimbabwe, 23-27 March 2020

Towards Development of an Action Programme to Address Food Security and Nutrition Challenges in Landlocked Countries in Africa

Executive Summary

Landlocked countries in Africa share some common characteristics that make them vulnerable to external shocks with negative impacts on livelihoods, food security and nutrition. In view of these challenges, the 30th Session of the Food and Agriculture Organization of the United Nations (FAO) Regional Conference for Africa recommended that consideration be given to the food security and nutrition situation in these countries.

The assessment of food security and nutrition situation, trends in economic growth and social development, agricultural transformation process as well as trade and competitiveness suggest that geography, while undoubtedly important, is not necessarily the key driver of food insecurity.

Addressing the needs of landlocked food-deficit African countries requires actions in key areas, including increasing public and private sector investment in agriculture, pro-active actions to engage these countries in regional initiatives and sustained efforts to improve their competitiveness and business regulatory environments.

FAO's Hand in Hand Initiative provides a holistic framework to support country led and country owned actions to respond to the needs of the highly vulnerable populations in landlocked African countries and consider effective responses to mitigate and overcome the effects of shocks that result in negative impacts on livelihoods, food security and nutrition . The recently established Office for Small Island Developing States (SIDS), Least Developed Countries (LDCs) and Landlocked Least Developed Countries (LLDCs) will play a key role in rolling out FAO's Hand in Hand Initiative to develop an action programme to address food security and nutrition challenges in African Landlocked countries.

Matters to be brought to the attention of the Regional Conference

The Regional Conference may wish to consider the following conclusions from this report:

a. Landlocked countries' economies are less diversified and more vulnerable to various types of shocks. On the other hand, they have huge potentials to increase agriculture production and productivity. There is a need to harness public and private investment in agriculture to capitalize on those huge potentials.
b. Proactive policies will be needed to improve the business and regulatory environment, strengthen institutions, and promote investments for building competitiveness in food and agriculture. Useful lessons could be drawn from successful African experiences in this regard.

NC555/e

c. Regional and continental initiatives, such as the African Continental Free Trade Area, Programme on Infrastructure Development in Africa and Africa Climate Smart Agriculture Vision 25X25 should proactively and meaningfully engage landlocked countries to address their food security and nutrition challenges.
d. Efforts are required to further strengthen collaboration between landlocked African countries and their respective transit neighbours. Policy priorities and investments need to emphasize the close interaction between landlocked countries and transit countries for enhanced food security and trade. This could be achieved through developing a holistic, results-oriented and time-bound programme of action focusing on important transit policy reforms to address physical and non-physical aspects of transport and ICT connectivity in landlocked and transit countries.
e. Note FAO's establishment of the Office for Small Island Developing States (SIDS), Least Developed Countries (LDCs) and Landlocked Least Developed Countries (LLDCs) and encourage member states in the Africa region to increase focus on and engagement with landlocked African countries within the framework of the Hand in Hand Initiative
f. Encourage FAO to strengthen coherence in supporting Landlocked countries in Africa, considering their vulnerability to unique and complex food security and nutrition challenges.

I. Introduction

1. Article 124 of the United Nations Convention on the Law of the Sea (UNCLOS) defines a landlocked country as a state that has no sea coast. In contrast, transit developing countries are states situated between a landlocked state and the sea, through whose territory traffic transit passes. Landlocked developing countries must tranship goods through one or more transit countries in order to trade with the rest of the world. Recognizing this challenge, landlocked states enjoy certain rights in international law while transit countries have specific obligations to landlocked states with respect to access rights through their territory to facilitate trade and integration in regional and global markets.[1] The Almaty Programme of Action,[2] adopted in 2003 by the International Ministerial Conference of Landlocked and Transit Developing Countries, aimed at forging partnerships to overcome the specific problems of the landlocked developing countries, including those in Africa, which came about from their lack of territorial access to the sea and their remoteness and isolation from world markets.

2. Landlocked countries in Africa share a number of common characteristics that make them vulnerable to external shocks, resulting in negative impacts on livelihoods, food and nutrition security.[3] These common characteristics include economic structures that rely on a relatively higher share of agriculture value added in GDP. This reliance on agricultural-based income increases their vulnerability to the effects of climate variability and extreme weather events. It also makes these countries heavily reliant on international trade, especially imports, as these economic structures often have non-diversified exports that are skewed to a high proportion of primary commodities, raw materials and mining commodities. This non-diversified agrarian-based economy, coupled with a lack of direct access to the sea (resulting in remoteness and high

[1] For example, article 125 of the convention confers the right of access to and from the sea for the purpose of exercising the rights provided for in the convention including those relating to the freedom of the high seas. As such, landlocked states enjoy by mutual agreement freedom of transit through the territory of transit states by all means of transport (railway rolling stock, sea, lake and river craft, road vehicles and, where local conditions apply, porters and pack animals). Other obligations of transit states include application of fair charges and transit fees (article 127), provision of customs facilities (article 128), improvement of transport infrastructure (article 129), measures to reduce delays and other non-tariff barriers (article 130) and equal access to maritime ports by landlocked flag vessels (article 131). Some of these provisions are also reflected in World Trade Organization law.

[2] http://unohrlls.org/almaty-declaration-and-programme-of-action/

[3] There are 16 landlocked countries in sub-Saharan Africa: Botswana, Burkina Faso, Burundi, Central African Republic, Chad, Eswatini, Ethiopia, Lesotho, Malawi, Mali, the Niger, Rwanda, South Sudan, Uganda, Zambia, Zimbabwe.

transit costs) imposes significant constraints on their overall development and contributes to poverty and food insecurity. Additional costs of trade facilitation and logistics due to border crossing and long distances to seaports substantially increase transport costs including transit charges. In addition, low compliance with trade and transit agreement commitments significantly reduce the trade and competitiveness position of landlocked African countries in comparison to transit African countries.

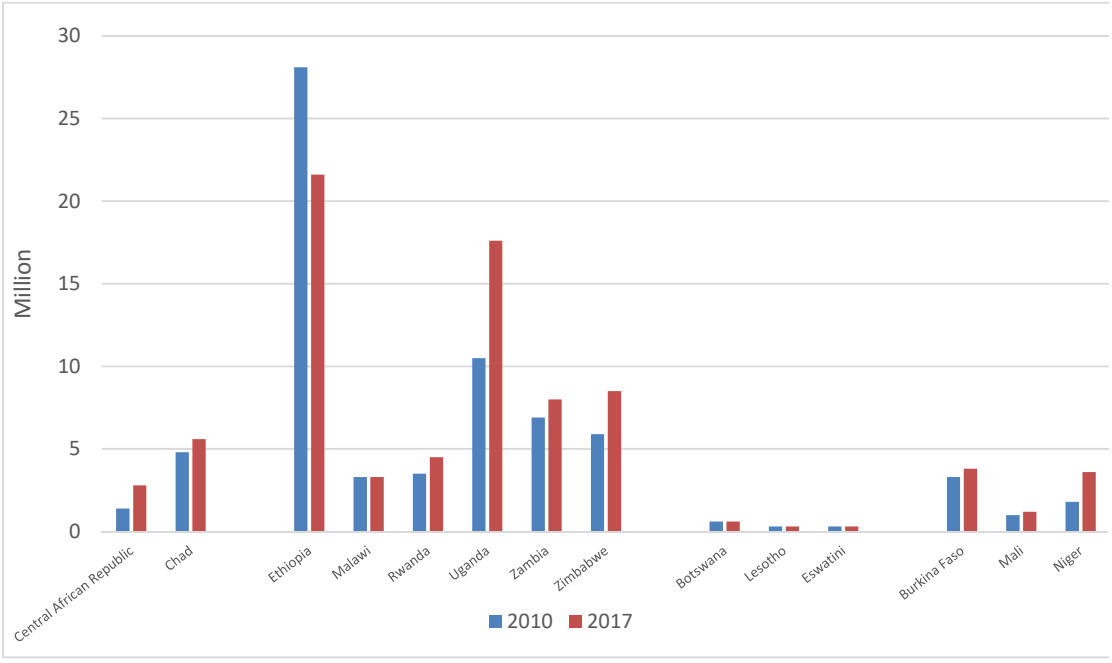
3. Cognizant of the challenges faced by landlocked African countries that are often also food deficit or insecure, member countries at the 30th Session of the FAO Regional Conference for Africa noted that landlocked food-deficit countries could benefit from the experience of the Small Island Developing States to address the similar challenges and issues affecting the two categories of countries. The Conference also supported further action to address the needs of landlocked food-deficit countries.

4. The objective of this paper is to provide an overview of recent trends and developments as well as the causes of the food security and nutrition situation in landlocked African countries with a view to identifying key issues that would inform the development of an action programme to address food security and nutrition challenges in landlocked food-deficit countries in Africa.

II. Food Security and Nutrition Situation in Landlocked African Countries

5. In 2010, 40 percent, or 72 million people, of all hungry people in sub-Saharan Africa lived in the 16 landlocked countries. This proportion fell to 36 percent by 2017, even though in most countries the number of undernourished rose (Figure 1). The rise was particularly pronounced for the Central African Republic and the Niger, where the number of undernourished doubled from 2010 to 2017. However, in several countries (Botswana, Eswatini, Lesotho and Malawi) there was no change. In Ethiopia there was a significant reduction. Excluding Ethiopia, the proportion of undernourished people in sub-Saharan Africa accounted for by landlocked countries increased from 24 to 26 percent.

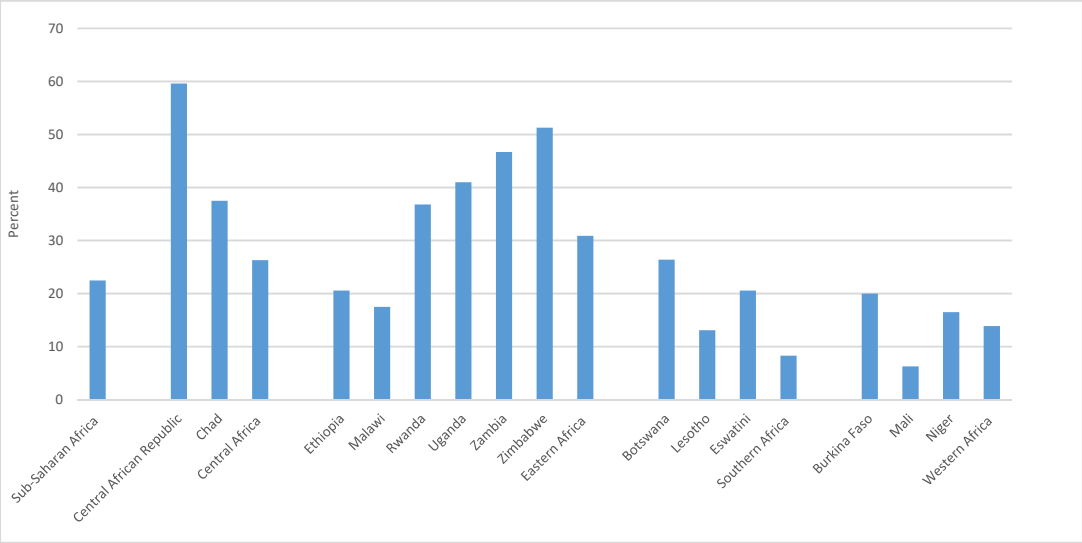
Figure 1: Number of Undernourished in Landlocked African Countries in 2010 and 2017



Source: FAO

6. In 2017, the prevalence of undernourishment (PoU, and one of the indicators for assessing Sustainable Development Goal [SDG] Target 2.1 of ending hunger by 2030) was, in most cases, higher in landlocked countries compared to the subregional average (Figure 2). Exceptions to this trend include Ethiopia, Malawi and Mali. The picture was quite similar in 2010, although the Republic of Ethiopia was marginally above the subregional average, and Uganda slightly below.

Figure 2: Prevalence of Undernourishment for Landlocked African Countries



Source: FAO

7. The pattern of the change in prevalence over time has been less clear. Nine out of ten land-locked countries saw the PoU fall more or rise less than the subregional average over the 2010 to 2017 period. More recently, most landlocked countries experienced rising hunger over the 2014 to 2017 period. However, no clear pattern emerges for landlocked countries.

8. The recent trend in hunger and food insecurity in landlocked countries in Africa is confirmed by estimates of severe food insecurity based on the Food Insecurity Experience Scale (FIES).[4] Estimates for sub-Saharan Africa reveal that for 2016-2018, the prevalence of severe food insecurity in the total population was most alarming in landlocked countries, with prevalence in all landlocked countries higher than the sub-Saharan Africa average of 25.1 percent and reaching 51.7 percent in both the Niger and Malawi. Estimates for severe or moderate food insecurity show a similar pattern of higher prevalence compared to other countries in the region.

9. In 2018 conflicts, followed by climate extremes and economic shocks, were the main causes of food crises, i.e. situations when people suffer acute food insecurity, in Africa.[5] There were crises or conflicts in 11 out of the 16 landlocked countries (almost 69 percent), as compared to 22 of 39 countries with coastlines (just under 56 percent). Nine out of 16 landlocked countries suffered food crises in 2018.

[4] The prevalence of severe and moderate food insecurity measure how many people do not have access to nutritious and sufficient food due to lack of money or other resources. People experiencing severe food insecurity have typically run out of food and, at worst, gone a day (or days) without eating. People experiencing moderate food insecurity face uncertainties about their ability to obtain food and have been forced to compromise the quality and/or the quantity of the food they consume.

[5] Acute food security refers to food deprivation that threatens lives or livelihoods, regardless of the causes, context or duration.

10. Key nutrition indicators for children under the age of 5 years – i.e. wasting, stunting and overweight – broadly follow patterns around the subregional averages, as opposed to being determined by their status as landlocked countries. This is also true for the prevalence of adult obesity, low birth weight, exclusive breastfeeding up to the age of 6 months, and anaemia among women of reproductive age. Several countries – notably Burkina Faso, Eswatini, Ethiopia, Lesotho, Malawi, Rwanda, Uganda and Zimbabwe – achieved significant reductions (and greater than the subregional average) in the prevalence of stunting in children under the age of five between 2012 and 2018.

III. Trends in Economic Growth and Social Development

11. Most, but not all, landlocked countries have per capita GDPs that are below their respective subregional averages. This picture has not changed in the last two decades. No clear patterns are apparent with regard to per capita GDP growth over past years; indeed, there is considerable heterogeneity among countries and subregions. Many landlocked countries experienced poor growth or economic downturns over the 2000-2018 period. In contrast, countries such as Ethiopia and Rwanda recorded strong, consistent economic growth over the same period.

12. The level of infant mortality varies by subregion and the relative position of the landlocked countries vis-à-vis the subregional average also varies by subregion. For Central and Western Africa, the indicators tend to be lower or worse and the landlocked countries in Central Africa generally perform below the average. However, this is not so for all landlocked countries. With reference to their respective subregion, Botswana, Mali and Rwanda have relatively stronger social development indicators and access to electricity.

IV. Agricultural Transformation, Production and Public Investment in Agriculture

13. Agricultural production in landlocked Africa countries is characterized by a variety of production systems with respect to agro-ecological conditions, land use and quantity of arable land[6]. Landlocked countries in the Sahel, for example, consist mostly of dryland or semi-arid land, used mostly for pasture. The Southern Africa region is sub-humid with significant variations in climate, soils and land use, while the Central Africa region is composed of humid lands.[7] In 2011 about 90 percent of Chad's 49.6 million hectares of agricultural land were under permanent pasture while Rwanda had 1.9 million hectares, of which 79 percent was arable or under permanent crops. There is arable land in landlocked countries, as evidenced by the 2016 figures for Burundi (47 percent), Malawi (40 percent) and Rwanda (47 percent). Livestock resources are also abundant in landlocked countries, with two countries (Chad and Ethiopia) accounting for almost 10 percent of sub-Saharan Africa's meat production. Landlocked African countries account for 36 percent of sub-Saharan land area, but only 26 percent of agricultural land (mainly Chad, Mali and the Niger), 32 percent of arable and permanent croplands and 25 percent of permanent pastures. Sustained public and private investments in agriculture have the potential to exploit this wide diversity in agro-ecological zones for agricultural transformation that can improve the lives of millions of people in these countries.

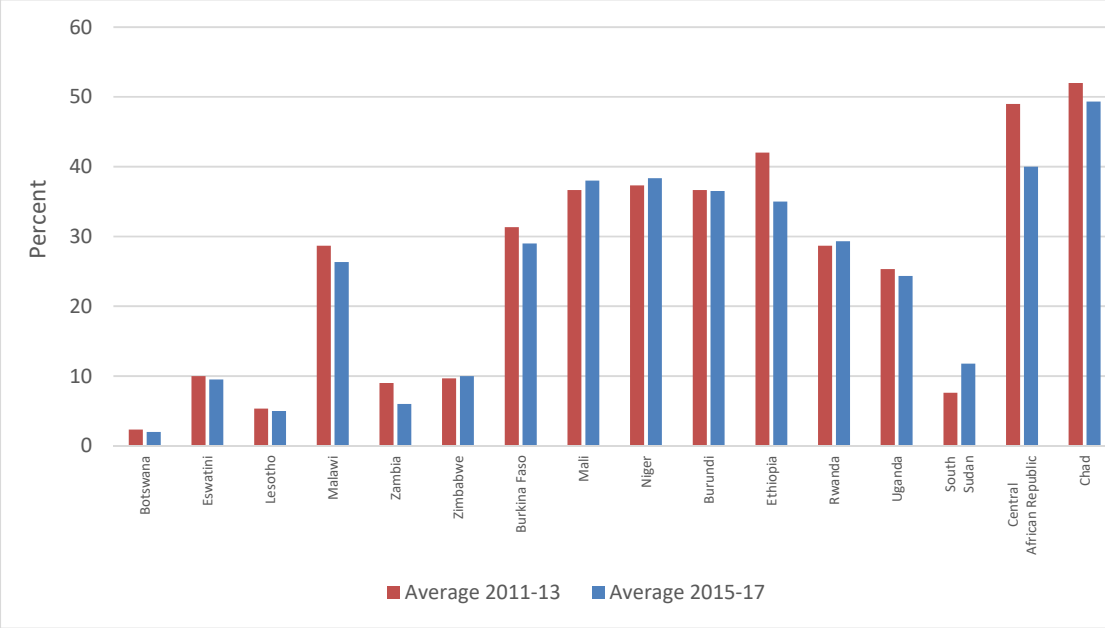
[6] Agricultural land includes arable land, as well as land under permanent crops, and under permanent pastures. Arable land includes land defined by FAO as land under temporary crops (double-cropped areas are counted once), temporary meadows for mowing or for pasture, land under market or kitchen gardens, and land temporarily fallow. Land abandoned as a result of shifting cultivation is excluded.

[7] FAO and ITPS. 2015. *Status of the World's Soil Resources (SWSR) – Main Report*. Food and Agriculture Organization of the United Nations and Intergovernmental Technical Panel on Soils, Rome, Italy.

14. Despite this diversity in agro-ecological conditions, agricultural productivity remains below potential in many landlocked African countries. Low input use is one key reason for this. For example, fertilizer use is distributed unevenly, with total fertilizer consumption (kilogram per ha) below the African average. Four landlocked countries, however (Botswana, Malawi, Mali and Zambia) – report a fertilizer consumption rate that is above the African average.

15. Most landlocked African countries – 10 out of 15 countries with data – have average share of the value added of agriculture in GDP above the 15 percent average for Africa. The relatively high share of the agricultural sector to GDP highlights the limited diversification in the structure of the economies in most landlocked African countries which makes them more vulnerable to climate-related risks.

Figure 3: Agricultural Value Added (Percentage of GDP)



Source: ReSAKSS

16. Public spending in agriculture is a key instrument for promoting agricultural growth, improving food security and reducing poverty. There is significant variability in public investments that can strengthen the capacity to deliver results in agriculture in many landlocked African countries. Few landlocked African countries are investing at or above the Comprehensive Africa Agriculture Development Programme (CAADP) target of at least 10 percent of public expenditures in agriculture. During 2015-2017 period, the share of public expenditure in agriculture ranged from 2 percent in Botswana to 15 percent in Malawi. Meanwhile, five countries – Burkina Faso, Malawi, Mali, Rwanda and Zambia – achieved or maintained the 10 percent CAADP target. About half of the landlocked African countries reduced the share of public expenditure in agriculture between 2011- 2013 and 2015-2017.

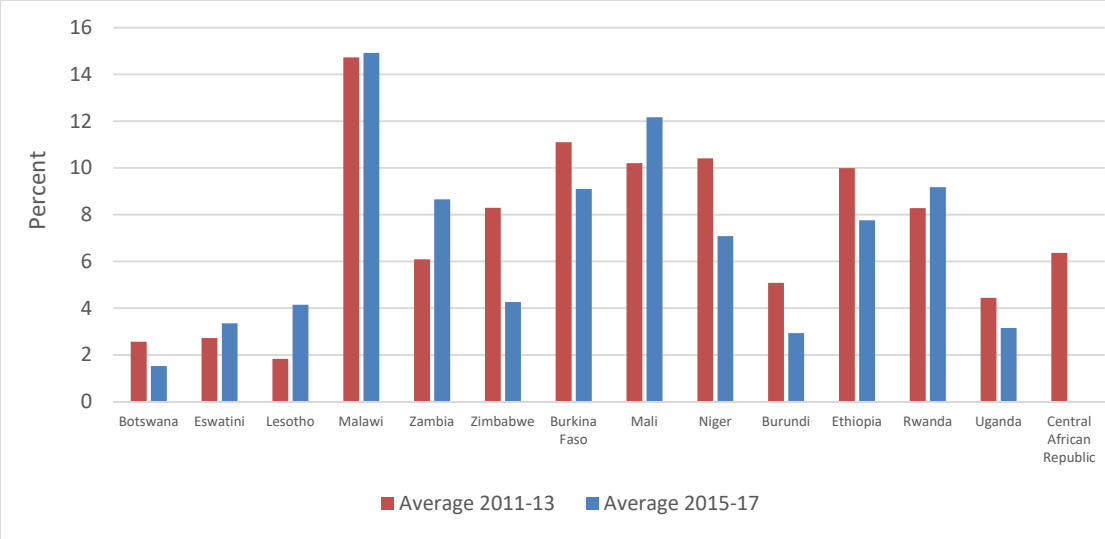
17. An important policy question is which public investments have the highest returns on agriculture, food security and nutrition. Public expenditure on agriculture, education and roads have been shown to contribute strongly to agricultural growth across regions, although to different degrees. Within agriculture, investment in research and extension has consistently yielded very high returns to productivity growth, which is often associated with improved food security and nutrition. Understanding the impact of different types of public investment may

guide public policy-makers to catalyse the combination of investments that produce the highest results in terms of agriculture, food security and nutrition.[8]

18. In addition to public investments, significant amounts of private financing will be needed in many African countries – whether landlocked, transit or coastal – since current funding from public sources, development partners and commercial lending is substantially lower than the investments required for transforming agriculture. Estimates from the African Development Bank show that, on average, an additional investment of USD 32-40 billion per year is needed to finance agricultural transformation in Africa. Closing this investment gap requires sustained efforts to attract private and institutional finance into agriculture and food systems. Countries seeking to attract such investments need to put in place enabling environments for private investments, including policies and regulations that foster the growth of agriculture, establish well-functioning food markets and enable private investments all along value chains. Innovative financing solutions such as de-risking tools and blended finance as well as demonstrations of the potential for risk-adjusted returns in agriculture and agribusiness projects can also be used to mobilize additional private finance for investments in agriculture.

19. Sustaining positive agricultural growth is a necessary condition for improving food security and reducing rural poverty. In this respect, few landlocked African countries recorded agricultural growth of at least 6 percent during 2015-2017. Over this period only four countries –Ethiopia (5.3 percent), Mali (6.7 percent), the Niger (6.3 percent) and Rwanda (5.3 percent) – exceeded 5 percent agricultural growth while seven countries recorded agricultural growth rates between 2 and 4 percent. Lesotho and Malawi experienced zero growth. Three countries –Burundi, Eswatini and South Sudan – had negative growth.

Figure 4: Government Agriculture Expenditure (% of total expenditure)



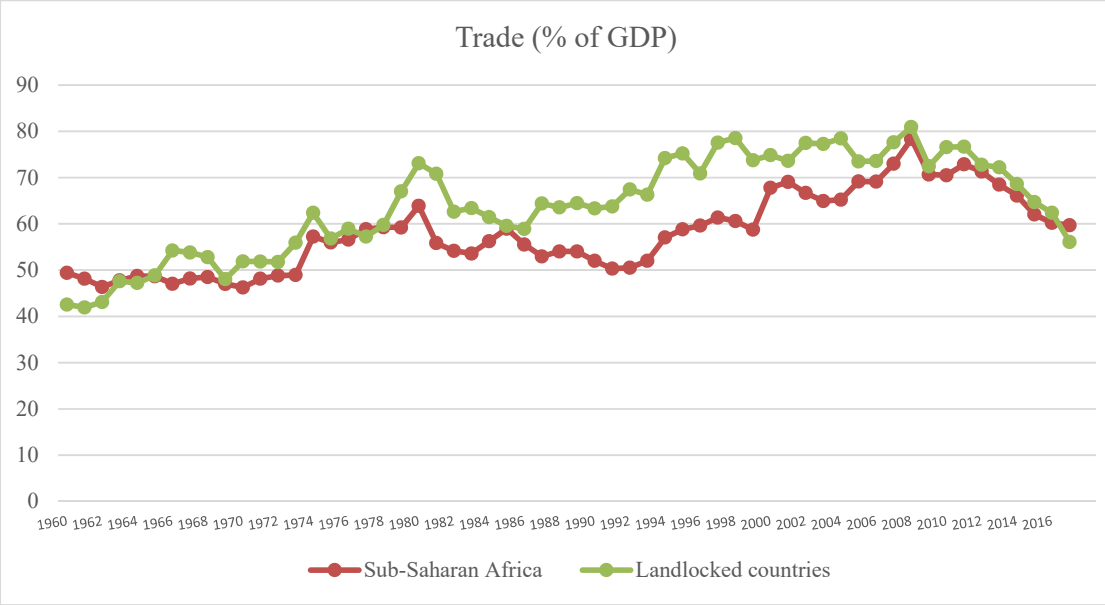
Source: ReSAKSS

[8] The State of Food and Agriculture 2012: Investing in Agriculture for a better future. Food and Agriculture Organization of the United Nations, Rome, 2012

V. Trade and Competitiveness

20. Landlocked countries in Africa are highly dependent on trade, slightly more than the rest of sub-Saharan Africa. In 2011-2013, trade, as a share of GDP, averaged 74 percent for landlocked African countries, compared with 71 percent for sub-Saharan Africa as a whole. In addition, the trade balance is negative, with imports exceeding exports in almost all cases. Most landlocked African countries, with the exception of Botswana, have a persistent trade deficit.

Figure 5: Trade (Percentage of GDP) in Landlocked Countries in Sub-Saharan Africa



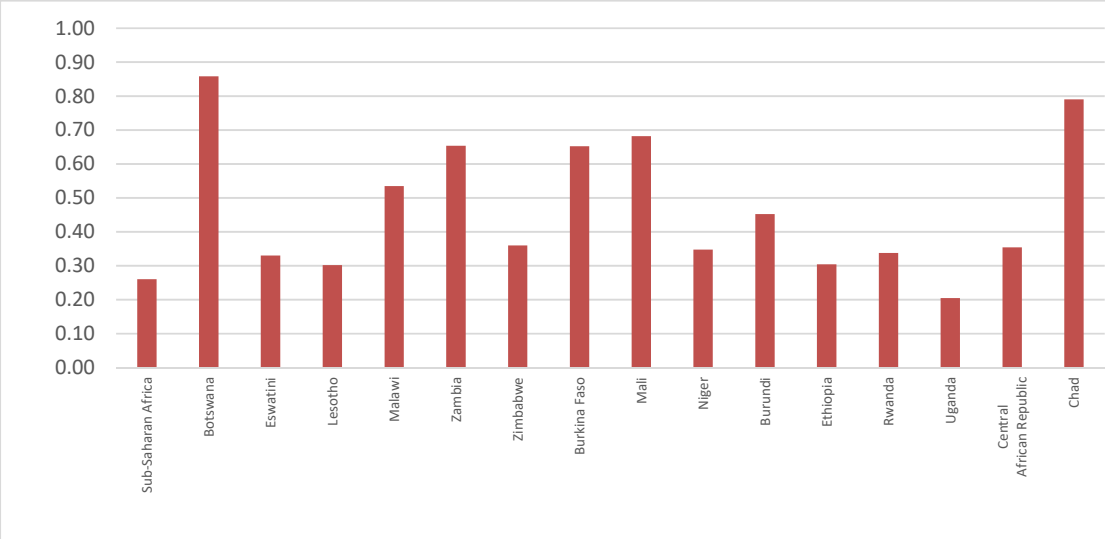
Source: Authors' calculation of the trade openness weighted by the trade value using World Bank data.

21. Landlocked African countries have a narrow production base. Exports are concentrated either on agricultural commodities with limited value addition or on mining commodities. The limited productive capacities and a non-diversified export structure makes these countries highly vulnerable to external shocks, such as a decline in global commodity prices. Exports are concentrated on diamonds in Botswana, oil in Chad, gold and cotton in Mali, uranium in the the Niger, and copper in Zambia.[9] Figure 6 shows the export concentration index.[10] Botswana, Burkina Faso, Chad, Mali and Zambia have the highest concentration of exports and are therefore less diversified. Only Uganda has a concentration index lower than sub-Saharan Africa as a whole.

[9] https://wits.worldbank.org/countrysnapshot/en/WLD/textview

[10] An index value closer to 1 indicates a country's exports or imports are highly concentrated on a few products. On the contrary, values closer to 0 reflect exports or imports are more homogeneously distributed among a series of products.

Figure 6: Product Concentration Index (HHI)[11] - Average 2015-17



Source: UNCTADStat

22. From a macro perspective, trade integration in landlocked countries remains low. The landlocked African countries' exports as a share of global exports is 0.2 percent compared to 1.4 percent for transit countries. Within the region, landlocked African countries' exports account for 12.6 percent of sub-Saharan Africa exports to the world while exports from transit countries account for 87.4 percent.

23. High tariff rates for final products and other non-tariff barriers in some landlocked Africa countries keep them highly protected and result in low export diversification.[12] This causes substantial welfare loss due to higher consumer prices, and higher costs to import intermediate products, equipment and tools.

24. Compared to transit countries, landlocked African countries are less likely than transit countries to benefit from trade opportunities in regional and global export markets to stimulate economic growth and address their food security situation. Table 1 presents the Logistics Performance Index (LPI), a measure of trade logistics based on six performance measures (1 is low to 5 is high).[13] Available data show that only three landlocked African countries – Botswana (3.04), Uganda (3.04) and Rwanda (2.99) – outperform the average LPI for sub-Saharan Africa of 2.4.

[11] The Herfindahl-Hirschman Index (HHI) is a common measure of market concentration, also used to determine market competitiveness.
[12] Lopez-Calix, J., & Pitigala, N. (2019). Trade Policy to Catalyze Export Diversification: What Should Landlocked Fragile Countries Do? The Cases of Mali, Chad, and the Niger.
[13] The LPI includes the competence and quality of logistics services, ease of arranging competitively priced shipments, frequency with which shipments reach the consignee within the scheduled or expected time, quality of trade and transport-related infrastructure, ability to track and trace consignments and efficiency of the customs clearance process.

Table 1: Trade Facilitation Data for Selected Countries

Country Name	Cost to export (US$ per container)	Cost to import (SU$ per container)	Country Name	Cost to export (US$ per container)	Cost to import (SU$ per container)
Landlocked Country			Transit Country		
Chad	6615	9025	Cameroon	1379	2267
Mali	2440	4540	Senegal	1225	1940
Burkina Faso	2305	4330	Ghana	875	1360
			Côte d'Ivoire	1390	1960
			Togo	1015	1190
Ethiopia	2380	2960	Djibouti	885	910

Source: World Bank

25. A comparison of the cost of trading across borders for selected landlocked countries and neighbouring transit states shows some interesting patterns. First, transit countries generally have lower costs to export and import a container than landlocked countries. The cost of trading across borders for Djibouti is a third of the cost for Ethiopia. Similarly, Ghana, a transit country, has among the lowest costs to export a container in West Africa because of improvements in trade facilitation and logistics infrastructure. Second, the variation in the cost to export and import a container tends to be less for transit countries that it is for landlocked countries. In other words, the cost to export and import are about the same for transit countries. Third, the distance to seaport also affects the cost of trading across borders. Land routes make the bulk of African total trade, accounting for 80 percent of the goods traffic,[14] while only a small share of trade is made using air transport. Burkina Faso (1100 - 1900 km), Chad (1800 - 1900 km) and Mali (1200 - 1400 km) have some of the largest distances to seaports. Nonetheless, the costs of exporting and importing a container for Burkina Faso and Mali are significantly less than those of Chad, suggesting that landlocked countries can overcome their geographic disadvantages and improve trade competitiveness with appropriate trade facilitation measures and investment.

26. The high level of dependence on road transport raises challenges for landlocked African countries, including road harassments (profusion of checkpoints, long delays, bribes). Traders using road transportation are also subject to a multiplicity of *ad hoc* border taxes, duties and fees, resulting in increased unpredictability and reduced transparency. These challenges, combined with the porous nature of borders, explain the importance of informal trade in cross-border trade. For example, the value of Uganda's informal exports is estimated to be worth one-third of formal trade (Uganda DTIS, 2013). About two-thirds of the Niger's trade with Nigeria is informal (Niger DTIS, 2008). Approximately 84 percent of Chad's agricultural trade is informal.[15]

27. Another dimension of connectivity is the development of Information and Communications Technology (ICT). Internet access is essential for businesses, public institutions and households to operate efficiently in a modern economy and can play a critical role in increasing connectivity, boost competitiveness and facilitate regional and global trade. In recent years, internet access has grown rapidly in sub-Saharan Africa but there are marked differences in internet usage by countries within the region. Landlocked African countries have particularly

[14] UNECA (2009). Africa Review Report on Transport.
[15] Lopez-Calix, J., & Pitigala, N. (2019). Trade Policy to Catalyze Export Diversification: What Should Landlocked Fragile Countries Do? The Cases of Mali, Chad, and Niger.

low internet usage because the cost of infrastructure necessary to provide the physical infrastructure is more expensive and getting access there is dependent on transit countries. Survey data show that in landlocked countries such as Burundi and the Niger only one percent of the population use the internet and this share is 2 percent of the population in Chad.[16] In contrast, 20 percent of the population in Rwanda use the internet, suggesting that public investments to expand access to electricity and internet are critical to ensure gains in internet usage, particularly expanding access to services in rural areas that contain the majority of food insecure and undernourished households.

28. Competitiveness indicators, such as the Doing Business (DB) indicators and the Global Competitiveness Index (GCI) show that landlocked African economies tend to underperform compared to their peers. Of the 190 countries ranked in the Ease of Doing Business, landlocked African economies such as the Central African Republic, Chad and South Sudan are among the bottom ten. Similarly, eight of the 16 landlocked African economies have GCI Scores that are below the sub-Saharan Africa median score of 45.2, with Chad at the bottom of all economies studied. There are, however, vast disparities in both the DB and GCI within landlocked African economies. Rwanda records impressive performance and is among the top 50 economies in the Ease of Doing Business Ranking. Botswana, Rwanda, Uganda and Zambia are above the sub-Saharan Africa median on the GCI. This wide diversity on competitiveness rankings suggest that regardless of geography, countries can still improve their business regulatory and competitiveness environment which are critical for sustained growth, jobs and income generation through proactive policies and committed leadership.

VI. Key Issues for Development of an Action Programme to Address Food Security and Nutrition Challenges in Landlocked African Countries

29. Landlocked African countries face special development needs and food security challenges that stifle their development potential and effective integration into the global economy. As requested by the 30th Session of the Regional Conference for Africa, urgent action is required to address the needs of landlocked food-deficit countries. The proposed action plan should be aligned with the Almaty Programme of Action and the World Trade Organization Trade Facilitation Agreement, which provide a unique opportunity to strengthen collaboration between landlocked African countries and their respective transit neighbours.

30. The issues identified in this paper show that geography, while important, is not necessarily the key determinant of food insecurity and malnutrition. Some of the landlocked countries in Africa have made significant progress in their food security and nutrition situation suggesting that a situation of landlocked-ness does not automatically translate into food insecurity and malnourishment.

31. Increased public and private sector investment in agriculture in landlocked countries is critical to unleash the potential from the abundant land and livestock resources and deliver results that increase agriculture production and productivity as well as improve the lives of millions of people who depend on agriculture for their livelihoods. The dependence of landlocked African countries on transit countries that are also low-income developing countries with similar resource endowments and economic structures makes the situation in landlocked countries particularly challenging. Landlocked African countries are completely dependent on their transit neighbours' infrastructure and administrative procedures to transport goods. Stability is another important dimension of food security, so regional coordination efforts are necessary to reduce price fluctuations (in response to international price shocks). There is therefore an urgent need to develop a holistic, results-oriented and time-bound programme of action focusing on

[16] Internet Access in Sub-Saharan Africa, Poverty & Equity Notes # 13, March 2019, World Bank Group

important transit policy reforms to address physical and non-physical aspects of transport and ICT connectivity in landlocked and transit countries.

32. A clear focus on food trade should be part of the solution to address food security and nutrition challenges in landlocked African countries. Trade policies that open food markets can increase availability and diversity of often highly processed foods and lower their prices for consumers. At the same time, a greater reliance on imported food may raise consumption of often cheaper, energy-dense foods that are nutrient-poor or high in fat, sugar and salt. Thus, careful consideration needs to be given to the trade-offs between making food cheap and affordable and the promotion of better nutrition practices, such as reducing the intake of foods with minimal nutritional value. A related priority action is to encourage the production, processing, distribution and marketing of healthy and nutritious foods, including indigenous African foods that contribute to better diets and prevent all forms on malnutrition.

33. Proactive actions to engage landlocked countries in regional initiatives provide new opportunities to address their food security and nutrition challenges. Regional integration through improvement of trade logistics and infrastructure, for example, has the largest potential to boost intra-continental trade, including in agriculture and food products, especially for landlocked African countries.[17] Regional initiatives include:
    - African Union initiatives such as the Programme on Infrastructure Development in Africa (PIDA) have been working with Regional Economic Communities (RECs) and member states to progressively address infrastructure bottlenecks and improve trade competitiveness by putting in place transboundary infrastructure (road, rail, power, water, air services). Renewed and strengthened partnerships to engage landlocked African countries in these initiatives would help improve productivity, connectivity and access to markets.
    - The African Continental Free Trade Area (AfCFTA) provides new opportunities to foster the development of regional value chains in landlocked African countries. The AfCFTA can potentially help to integrate landlocked African countries in regional markets by removing tariffs and non-tariff barriers, which are a major cause of high transaction costs and limited trade competitiveness. Promotion of regional value chains can link actors in different segments of national and regional value chains for value addition and create decent jobs and income opportunities, including for women and youth. The AfCFTA has also the potential to improve consumers' access to cheaper products and to boost cross-border agricultural trade.
    - Innovative climate-resilient practices need to be promoted at the continental level to assist landlocked African countries facing climate change. For example, the Africa Climate Smart Agriculture Vision 25X25 in Malabo is the African Union's vision of having at least 25 million smallholder farming households practicing Climate Smart Agriculture by 2025.[18] It will help farmers in landlocked African countries, especially subsistence farmers and those highly dependent on seasonal rains, to face adverse climate change (higher temperatures, extreme weather events and drought).

34. The vast disparities in agriculture performance, trade, trade facilitation and competitiveness within landlocked African countries suggest that significant progress can be made in an economy's competitiveness and business regulatory environment regardless of its geography. The existence of pockets of over-performance and under-performance in trade and competitiveness as well as internet connectivity within landlocked African countries suggest the need for proactive policies to improve the business and regulatory environment, strengthen institutions, and promote investments for building competitive economies to address the critical food security and nutrition challenges in landlocked African countries.

[17] Green, R., Issoufou, S., McGregor, T., Peralta-Alva, A., Sy, A., & Versailles, B. 3. (2019). Is the African Continental Free Trade Area a Game Changer for the Continent?

[18] https://www.nepad.org/news/africa-redouble-efforts-vision-25x25-climate-smart-agriculture