AFDB RESEARCH STUDY

DEVELOPMENT PERSPECTIVES ON SPECIAL AGRO-INDUSTRIAL PROCESSING ZONES (SAPZ) IN AFRICA:

LESSONS FROM EXPERIENCES

AFRICAN DEVELOPMENT BANK GROUP
GROUPE DE LA BANQUE AFRICAINE DE DÉVELOPPEMENT

Contents

Acronyms

ABC	Agricultural Business Chamber
ACET	African Centre for Economic Transformation
ACFA	Accelerated Co-financing Facility for Africa
ACP	African, Caribbean and Pacific
ACPC	Asarco Cocoa Processing Company
ADA	Agricultural Development Agency
AD LI	Agricultural Development-Led Industrialisation
ADP	Agricultural Diversification Project
AENP	Addo Elephant National Park
AFASA	Association of South Africa
AfCFTA	Africa Continental Free Trade Agreement
AfDB	African Development Bank
AGRA	Alliance for a Green Revolution in Africa
AgriBEE	Black Economic Empowerment Framework for Agriculture
AIF	African Investment Forum
ARC	Agricultural Research Council
ARISE IIP	ARISE Integrated Industrial Platforms
ASIP	Agricultural Sector Investment Project
ATA	Agricultural Transformation Agency
ATCP	Afrotropic Cocoa Processing
AU	African Union
AUABC	African Union Advisory Board on Corruption
B-BBEE	Broad-Based Black Economic Empowerment
BEE	Black Economic Empowerment
BPO	Business Process Outsourcing
BRI	Belt and Road Initiative
CAADP	Comprehensive Africa Agriculture Development Programme
CASP	Comprehensive Agricultural Support Programme
CDG	Caisse de depot et de gestion
CFA	Communauté Financière Africaine
C-IDZ	COEGA IDZ
COMFISH	Collaborative Management for a Sustainable Fisheries Future in Senegal
DALRRD	Department of Agriculture, Land Reform and Rural Development
DBE	Development Bank of Ethiopia
DBSA	Development Bank of South Africa
DEFF	Department of Environment, Forestry and Fisheries

DFC	Development Finance Corporation
DRC	Democratic Republic of the Congo
DTI	Department of Trade and Industry
EBRD	European Bank for Reconstruction and Development
ECA	Economic Commission for Africa
ECOWAS	Economic Community of West African States
EHPEA	Ethiopian Horticulture Producers and Exporters Association
EL-IDZ	East London Industrial Development Zone
EPZ	Export Processing Zone
ETB	Ethiopian Birr
EU	European Union
FAO	Food and Agriculture Organization
FASDEP	Food and Agriculture Sector Development Policy
FDA	Food and Drug Administration
FDI	Foreign Direct Investment
FFV	Fresh Fruit and Vegetables
FPEAK	Fresh Produce Exporters Association Kenya
FSSC22000	Food Safety System Certification 22000
FTZ	Free Trade Zones
GAP	Good Agricultural Practice
GDP	Gross Domestic Product
GEAR	Growth, Employment and Redistribution
GEL	Golden Exotics Ltd

GEPA	Ghana Export Promotion Authority
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit
GoE	Government of Ethiopia
GoG	Government of Gabon
G-SEZ	Gabon Special Economic Zone
GTP-II	Growth and Transformation Plan II
GVC	Global Value Chains
HCAS	Horticulture Competent Authority Structure
HCDA	Horticultural Crops Development Authority
IAIP	Integrated Agro-Industrial Park
IAIP	Integrated Agro-Industrial Park
ICT	Information and Communications Technology
IDP	Integrated Development Plan
IDZ	Industrial Development Zone
IFC	International Finance Corporation
IFPRI	International Food Policy Research Institute
IISD	International Institute for Sustainable Development
ILO	International Labour Organization
ITD	Innovations in Technology Dissemination
IWOSS	Industries Without Smokestacks
JAS-ANZ	The Joint Accreditation System of Australia and New Zealand (JAS-ANZ)
JICA	Japan International Cooperation Agency

KALRO	Kenya Agricultural and Livestock Research Organization
KEPHIS	Kenya Plant Health Inspectorate Service
KFC	Kenya Flower Council
KRA	Kenya Revenue Authority
LDO	Land Development Objectives
LED	Local Economic Development Plan
LRAD	Land Redistribution for Agricultural Development
MAD	Moroccan Dirham
MAPMDREF	Ministry of Agriculture, Marine Fisheries, Rural Development, Water and Forests
MENA	Middle East and North Africa
METASIP	Medium-Term Agriculture Sector Investment Plan
MITC	Ministry of Industry, Trade and Cooperatives
MNC	Multinational Corporations
MPEM	Ministere des Peches et de l'Economie Maritime
MSE	Micro and Small Enterprises
MSME	Micro, Small and Medium Enterprises
MTSF	Medium-Term Strategic Framework
NAFU	National African Farmers' Union of South Africa
NAMC	National Agricultural Marketing Council
NDP	National Development Plan
NFFPFATU	National Federation of Farm, Plantation, Fishery and Agro Industry Trade Unions
NPEM	Norme de performance énergétique minimale
OBJ	Oxford Business Group
OECD	Organisation for Economic Co-operation and Development
ONCA	National Agricultural Extension Agency
ONSSA	National Authority for Food Security and Safety
PAPMV-2	Green Morocco Plan Support Programme
PCPB	Pest Control Products Board
PEF	Perpetual Education Fund
PGDS	Provincial Growth and Development Strategies
PPP	Public-Private-Partnership
PPP	Public-Private-Partnership
PROSEAD	Promotion of Sustainable Ethiopian Agro-industrial Development
PSGE	Plan Strategique Gabon Emergent
QSAE	Quality and Standards Authority for Ethiopia
R&D	Research and Development
RDP	Reconstruction and Development Programme
RIPDC	Regional Industrial Park Development Corporations
RMCs	Regional Member Countries
RTC	Rural Transformation Centre
SADC	Southern African Development Community
SADC	Southern African Development Community
SAPZ	Special Agro-Industrial Processing Zone
SCPZ	Staple Crops Processing Zone
SDGs	Sustainable Development Goals

SDI	Spatial Development Initiative
SDOQ	Signes distinctifs d'origine et de qualité
SEZ	Special Economic Zone
SME	Small and Medium-sized Enterprises
SMME	Small, Medium and Micro Enterprises
SNNP	Southern Nations, Nationalities, and People's
SNNPR	Southern Nations, Nationalities, and People's Region
SPCZ	Staple Crops Processing Zone
SRCC	Sundays River Valley Citrus Company
SRV	Sundays River Valle
SRVM	Sunday's River Valley Municipality
SSA	State Security Agency
StatsSA	Statistics South Africa
TAU SA	Transvaal Agricultural Union South Africa
TICAD	Tokyo International Conference on African Development
ToR	Terms of Reference
TVET	Technical and Vocational Education and Training
UK	United Kingdom
UN	United Nations
UNCTAD	United Nations Conference on Trade and Development
UNECA	United Nations Economic Commission for Africa
UNIDO	United Nations Industrial Development Organization
UNU-WIDER	United Nations University - World Institute for Development Economics Research
US	United States
USAID	United States Agency for International Development
USD	United States Dollar
USDA-NOP	United States Department of Agriculture - National Organic Program
VAT	Value-added tax
WDI	World Development Indicators

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Executive Summary

The broad objective of this study is to undertake research on development perspectives of an integrated agro-industrial ecosystem in Africa that the African Development Bank (AfDB)[1] has developed and termed Special Agro-Industrial Processing Zones (SAPZs). The SAPZ model is conceptualised by the Bank as its brand for a spatial development solution in the rural landscape aimed at the achievement of agricultural transformation across the continent. The study is conceived as a 'knowledge product' which is intended to provide relevant information and policy guidance that can be useful to the Bank for the design and programming of the SAPZ model. As a knowledge product relevant to the planning and implementation of SAPZs, the study: (i) defines and explains important conceptual and strategic questions; analyses key policy issues and institutional factors; and (ii) presents and interprets empirical evidence from a selection of abridged case studies drawn from existing agro-industrial experiences covering farming, intermediate agriculture, fisheries and forestry activities.

The study makes use of a political economy framework to illustrate critical elements involved in the application of the SAPZ model to planning, policy-making and implementation in a practical context, such as the role of the state, engagement of the private sector, financing modality, incentives and benefits. The analysis locates the SAPZ model within a taxonomy of agro-industrial zones, parks and clusters in Africa, which is illustrated by a detailed listing of past and existing agro-industrial agglomerates in African countries over the past four decades in an annex to the study. The study frames the SAPZ model within the institutional mandate and relevant programme parameters of the AfDB, for the purpose of indicating upfront how the Bank's official responsibility and the scope and capacity of its technical and operational activities in areas such as of agriculture, infrastructural investment, private sector development, industrial policy, and regional initiatives can support the implementation of the SAPZ model to respond to the region's agricultural transformation challenge. This challenge broadly encompasses the urgent need to ensure food security, improve agricultural productivity, create and develop value chains to enhance international competitiveness, and reduce poverty, and foster inclusive growth and sustainable development

The starting point for the study is the Bank's 'Feed Africa Strategy', developed within the framework of the five development priorities (the 'High 5s') which the Bank's President, Dr Akinwumi Adesina, identified in 2015 as the foundation for economic transformation in Africa. The Feed Africa Strategy seeks to prioritise food security in the development agenda of African countries and was presented as a continent-wide scheme for transformation of African agriculture. The SAPZ model has its origin in the Bank's 'Staple Crops Processing Zones' (SCPZs) which was launched as a flagship of the Feed Africa Strategy, and the model is also directly related to another of the High 5s , the Industrialise Africa development priority, which provides the rationale for identifying agro-industrialisation as a strategy for agricultural transformation in Africa.
From a wider development perspective, the study highlights and endorses the Bank's conceptualisation of the SAPZ model as an approach for promoting inclusive growth through opportunities for the participation of small-scale farmers, producers and input suppliers in productivity-enhancing and value-addition production, processing, distribution and marketing activities associated with the SAPZs. The study outlines the extent of the Bank's current and planned engagement with its Regional Member Countries (RMCs) in the development and implementation of SAPZ-type projects, covering activities and intentions from countries across all regions of the continent, which underlines the strong commitment of the institution to promote SAPZ as a flagship spatial development solution for the rural landscape of Africa.

The study presents and explains the importance of agro-industrialisation in African development. Development challenges have a strong spatial dimension and broadly speaking pertain to uneven economic development, regional disparities and urban-rural spatial inequalities in Africa. More specifically, the slow pace of structural transformation across most African countries today is due to low levels of agricultural productivity; weak linkages between sectors and poor integration of agriculture into channels of value-addition, and of African firms into higher-value functions of agro-industrial global production networks and value chains. These constraints each pose barriers to achieving the type of scalable agricultural transformation required to unleash structural change, i.e. the shift in sectoral activity leading to a reallocation of resources across the economy and movement away from primary production activities.

The study explains the SAPZ model in terms of concept, operation and outcome through a detailed diagrammatic illustration which responds to these very challenges by highlighting key actors and drivers

1 Herein after referred to as "the Bank"

of SAPZ operations and how their interactions can produce desirable outcomes in terms of development impact. It reflects and depicts the AfDB's understanding that introduction of the SAPZ model has the potential to become the largest contributor to agricultural transformation and rural development; structural change based on economic diversification and industrialisation; income and employment generation; and private sector development, within African economies.

The SAPZ model offers a flagship spatial solution for transforming Africa's agriculture into a high value-added industry. Targeting both the integration and upgrading of agro-industrial activities, it encompasses production, upstream and downstream transformation, processing, logistics and marketing. The elements for developing this diagrammatic presentation of the SAPZ model are derived from both an extensive review of spatial development models in Africa, as presented in the Annex and from comparative examples of Special Economic Zones (SEZs) globally, as in Asia (e.g. China, Malaysia, Singapore, Sri Lanka, Indonesia, Cambodia, Vietnam), Latin America (e.g. Costa Rica, Dominican Republic, Colombia, Panama), Middle East and North Africa (e.g. Egypt, Jordan, Tunisia, Morocco, UAE) , and Europe (e.g. the Netherlands, the Balkans).

The study pays particular attention in its analysis of the operational context of the model to the role of the state as an 'enabler' and that of the private sector as a 'source of investment' for SAPZs. These are key 'actors' identified by the Bank with respect to the design and programming of the SAPZ model. The critical role of the state relates to requirements for catalysing government capacity and governance to unlock the development potential of the agricultural sector and drive the transformational process in the sector. These requirements include leadership and political will at the highest level to champion and own the process for agricultural transformation through agro-industrialisation operations; provision of a stable macroeconomic framework as part of a strategy and an enabling policy environment for attracting private investment; proper legal and regulatory institutional framework for coordinating and monitoring the execution of SAPZ type projects and programmes.

With respect to private investors, the analysis focuses on the scope and opportunities, as well as risks, for stimulating and strengthening their participation in the planning and implementation of SAPZs. Contingent on government enabling strategies, the analysis explores how the financial and knowledge resources (i.e. financial modality, technology and innovation) of the private sector can be harnessed for investment in SAPZs as a profitable venture and with significant development benefits for the host government and people (e.g. revenue and foreign exchange earnings, skills upgrading and employment opportunities).

The study evaluates eight descriptive country case studies of different agro-industrialisation experiences in Africa. The selection of case studies draw upon a number of spatial agro-industrial processing activities across the continent: integrated agro-industrial parks in Ethiopia; horticulture clusters and value chains in Ethiopia and Kenya; the export promotion of the fisheries sector in Senegal; integrated agropoles in Morocco; crop agro-processing in Ghana; agribusiness and zone development in South Africa; and a major agro-industrial SEZ in Gabon's forestry sector. The aim is to provide evidence of success factors and pitfalls to avoid in the application of the SAPZ model to different types of agricultural production in the continent – farming, intermediate agriculture, fisheries and forestry. Evaluation of the performance of each of the case studies and the lessons therefrom serve as evidence base for recommendations on strategies, policies and guidelines for planning and operating SAPZs.

The main 'takeaways' from the study from the perspective of the Bank's development mandate and interests are, first, that the SAPZ model is an appropriate spatial solution that has potential to improve food security, transform agriculture and promote rural development. Second, a development approach based on the concept and operational features of the SAPZ model is a viable strategy for promoting inclusive growth through widening participation and balanced development resulting from dispersed urbanisation (i.e. 'secondary cities' outcome). Third, the application of the SAPZ model to development planning is conducive to providing support for regional integration initiatives and value chain development and upgrading. Fourth, the application of SAPZ model as an industrial development strategy is useful for addressing contemporary environmental challenges, including transitioning to green industrial growth based on agro-industrialisation, as compared with conventional manufacturing, and also conservation of fisheries and forestry industries, as illustrated from the case studies.

1

Introduction: Transforming African Agriculture through Agro-industrialisation

1.1 Background: The status of African agriculture and sustainable development challenges

One of the most promising options for sustainable development in Africa lies in transforming the agricultural sector including fisheries, which provides the mainstay of livelihoods for around two-thirds of the continent's estimated 1.3 billion people. Despite growth in the manufacturing and services sector activities over the past two decades, agriculture remains the largest employer of labour in African countries; it accounts for more than half of the active labour force across the region and the rural population is forecasted to remain the majority till 2030 (World Bank, 2019; OECD-FAO, 2016).

Farming dominates production in the sector with a commodity mix of staple crops and primary exports which accounts for around 90 per cent of total output (Osabuohien, 2020). Most farming is small-scale with low-productivity and yields and limited access to financial support, infrastructure and distribution systems. Hence, despite the fact that agriculture constitutes the largest share of employment in Africa, its contribution to GDP is low: between 1990 and 2000, agriculture's contribution to GDP in sub-Saharan Africa (SSA) declined from 20.3% to 17.5% and further declined to 15.6% by 2018 (World Bank, 2019). Minimal improvement in production factors (labour and land) over time, and lack of investment in agriculture have contributed toward increasing the sector's vulnerability to climate change in a region where crop production is almost entirely dependent upon rain.

Consequently, agriculture has so far not made any significant contribution to economic transformation and sustainable development in Africa, either by ensuring food security or creating productive and remunerative jobs as needed to reduce poverty. Although there has been increase in productivity more recently in African agriculture, both labour and land productivity levels are relatively low as compared with Asian and Latin American countries; in addition, the share of value-addition that improves productivity and upgrade agricultural products into higher value goods for marketable consumption is less than half than that observed in other developing regions (OECD-FAO, 2016)

Restricted production and limited market characteristics of African agriculture, compounded by fast growing demand for food that is projected by the FAO to double by 2050 due to rising population and urbanisation (FAO, 2020; FAO and AfDB, 2019), underscore the limited development impact of the sector. Accordingly, there has been mounting concern within development policymaking circles in and beyond the region regarding the status of African agriculture, and towards the urgent need to transform production from traditional low productivity and low value activities toward to more productive, competitive value addition and market-driven practices.

In view of the importance of agriculture in the continent's rural landscape, the transformation of the sector will impact positively on rural development, both of which are interrelated and will require critical and sustained productivity-enhancing investment to reach their full potential for contributing to sustainable development. In accordance with its broad institutional mandate to promote economic and social development and reduce poverty in the region, the African Development Bank (AfDB) has identified the transformation of African agriculture and rural development as an interlinked priority development objective related to two strategic goals that would enhance the sector's growth and its contribution to sustainable development: food security and inclusive growth.

With respect to food security, it is estimated that Africa currently spends a total of about USD 75 billion annually on food imports from outside the continent (FAO and AfDB, 2019), which constitutes a huge drain on scarce foreign exchange funds that could otherwise be used for physical and human development needs. The Bank anticipates that that Africa's net food imports could reach USD 110 billion by 2025, and its President, Dr Akinwumi Adesina, observed that such high and increasing level of annual food import bill "weakens African economies, decimates its agriculture and exports jobs from the continent," and note furthermore the amount spent on food imports "is just about the same amount [Africa] needs to close its power deficit" (AfDB, 2017a).

As regards to inclusive growth, the upgrading of agriculture into higher value goods for marketable consumption would entail widening participation,

resulting from the involvement of smallholder farmers and upstream and downstream activities with productive employment and income gains. Furthermore, value-addition in production will facilitate the better integration of products into a wide range of agricultural value chains in regional and global markets. The AfDB attaches a high priority to value chain development and upgrading for transiting from comparative to competitive advantage in agricultural production (AfDB 2017b and 2017c). This is supported by the institution's operational programmes in the areas of industrial and trade policy, infrastructural investment, private sector development, technology and innovation, and skills and entrepreneurship training.

The transformation of African agriculture to meet the challenges of sustainable development would entail strategies, policies and action programmes at all levels of public decision-making – ranging from continental multilateral and development institutions, like the African Union (AU) and the UN Economic Commission for Africa (ECA), to regional economic communities such as ECOWAS and SADC, and national and local governmental authorities. There is already awareness by the continent's political leaders and governments that agricultural transformation holds out prospect for food security and saving on foreign exchange; additional foreign exchange earnings from export; and expansion of the sector's capacity to absorb underutilised and surplus rural labour on a productive and remunerative basis.

Summit declarations adopted by the African Union (AU) to support the organisation's Comprehensive Africa Agriculture Development Programme (CAADP)[2] call for a pan-African planning and policy framework for agricultural transformation and increased public investment in the sector, with food security, rural job creation and poverty reduction identified as objectives. Additionally, more open trade policies as envisaged in the recently ratified Africa Continental Free Trade Agreement (AfCFTA), as well as existing and proposed external trade agreements by African countries with the EU, US, UK-Brexit, etc., could help the region and individual countries to seize opportunities for entering higher-value agricultural and agro-industry supply chains connected with global markets.

Agricultural transformation is crucial for ensuring productivity across value chains, and the agricultural sector is regarded as one of the most critical sectors of African economies with prospects for accelerating progress towards sustainable development. The World Bank estimates that Africa's agribusiness (defined as all aspects of the agri-food system except on-farm production) could become a US$ 1 trillion market by 2030 (in 2010 prices), and that does not include the value of the additional agricultural production that will be needed to support growth in agribusiness (World Bank, 2020).

1.2 Intervention by the African Development Bank (AfDB) - Origin of the SAPZ model

The AfDB has set out to play a positive role in catalysing and supporting the transformation of agriculture in the region into an internationally competitive sector and an important contributor to sustainable development. In his inaugural address in 2015, Dr Adesina outlined five development priorities for the economic transformation of the continent, popularly referred to as the "High Fives" (High 5s).[3] These include the 'Feed Africa Strategy'[4] which was proposed by the Bank in response to the need to prioritise food security in the development agenda of African countries. This strategy is directly linked to the institution's continent-wide scheme for transforming agriculture into a "globally competitive, inclusive and business-oriented sector that creates wealth, generates gainful employment and improves quality of life in rural areas" (AfDB, 2017b).

In the context of Bank's High 5 agenda, the 'Industrialise Africa' Strategy provides the rationale for the transition from a low-productivity agrarian to an internationally competitive agro-industrial economy. Under President Adesina, AfDB revived its commitment to infrastructural development and regional integration with a concerted focus on industrialisation; this agenda has paid closer attention to the continent's participation in global value chains with an eye on upgrading into higher value activities. It is against this background that the AfDB focused on the design and programming of a spatial model of agro-industrial processing, termed the 'Special Agro-Industrial Processing Zone' (SAPZ), which is intended to serve as a strategic spatial solution for transforming Africa's agriculture into a high value-added industry.

The SAPZ model is also aligned with the institution's drive to encourage and facilitate access of Africa's youth into agribusiness as a viable and rewarding

2 The first CAADP Declaration was adopted by African heads of state in Maputo in 2003 followed by a second Declaration adopted at an AU summit in Malabo in 2014.

3 The High Fives are: Light up and power Africa; Feed Africa; Industrialise Africa; Integrate Africa; and Improve the quality of life for the people of Africa

4 AfDB's Feed Africa Strategy (2016-2025). https://www.afdb.org/fileadmin/uploads/afdb/Documents/Generic-Documents/Feed_Africa-_Strategy_for_Agricultural_Transformation_in_Africa_2016-2025.pdf

employment option. The Bank's "Jobs for Youth in Africa" scheme seeks to leverage the continent's demographic dividend stemming from its youth bulge. The SAPZ model therefore constitutes an appropriate instrument for fulfilling the AfDB's vision, to transform agriculture and promote rural development across the region as pathways to inclusive economic growth, job creation and poverty reduction on a sustainable basis.

1.3 SAPZ: Definition, concept and rationale

The Bank has defined SAPZ as "an integrated (demand and supply side) agro-industrial ecosystem comprising production, processing, distribution, marketing with a continental and global reach aimed at transforming Africa's agriculture from an incremental-existential mode into a business-industrial complex."[5] The SAPZ has its origin in the Bank's 'Staple Crops Processing Zone (SCPZ) initiative which was launched as a flagship programme under the Feed Africa Strategy.[6] The SCPZ was conceptualised as "an agro-based spatial development initiative, advanced to agglomerate agro-processing activities within areas of high agricultural potential with the aim to boost productivity and integrate production, processing and marketing of selected commodities" (AfDB, n.d.).

The SAPZ is presented by the Bank as a broader (than the SCPZ) conceptualisation of an agro-industrial development spatial solution that can be situated within and alongside a wide-ranging typology of different agro-based agglomeration systems.[7] The SAPZ, which can be applied to the full range of agricultural production activities as recognised by the FAO – i.e. farming including livestock, fisheries, and forestry – is a unique brand of the AfDB that is designed to achieve the twin objectives of agricultural transformation and rural development through agro-industrialisation. The aim is to promote the SAPZ model as a mechanism for spatial development within the rural landscape, with the potential to yield multiple benefits across the entire spectrum of agricultural value chains – from production and supply, to design, processing and packaging, and maintenance, to distribution, marketing and consumer services.

The importance of the SAPZ agro-industrial model for agricultural transformation is linked to the apparent neglect of agriculture in overall development efforts in most of sub-Saharan Africa (SSA), as depicted by long-term underinvestment and poor governance that have characterised agriculture in the region. This neglect, which stems from the colonial legacy of exporting primary commodities in bulk unprocessed form with no value addition, sealed the fate of agro-industrialisation as a rarity in the development process of SSA- with few exceptions (e.g. South Africa, Kenya and Mauritius).

Agro-industrial processing currently accounts for less than a sixth of total agricultural production in the region, compared to between half and three-fifths in developing Asia and the Pacific. Consequently, the ratio of value-added agribusiness to primary production in SSA has remained the lowest in the world, at 0.6 compared to 5 in Latin America. Even the share of agriculture in GDP for SSA has experienced a steady decline over the past four decades, from about 25 per cent in 1980 to under 20 per cent in 2000, and 17.5 percent in 2018.

Over the past decade, there has been agreement among leading global and regional multilateral development research institutions dealing with agricultural issues in Africa, such as the FAO (FAO, 2017), UNIDO (UNIDO, 2012), World Bank (World Bank 2011), OECD (OECD-FAO, 2016) AfDB (AfDB, 2016; FAO and AfDB, 2019), UNU-WIDER (Newman and Page, 2017), IFPRI (Fukase and Martin, 2017), and AGRA (AGRA, 2019), that agro-industrialisation is an appropriate strategy to address lag in agricultural productivity and related challenges in order to develop and strengthen value chain activities in the region.

Since the SAPZ initiative was launched, the Bank has been involved in various phases of specific and allied agro-industrialisation activities in a number of African countries, including Ethiopia and Togo, with approved operations in Guinea, Mali and Senegal and feasibility studies underway in Cote d'Ivoire, Liberia, Madagascar, Mozambique, Nigeria and Zambia. Several other countries have also shown interest in the SAPZ model including South Africa, Mauritius, Tanzania, Democratic Republic of Congo, Kenya, Uganda and Egypt.

1.4 Contextualising the SAPZ model in a broad taxonomy of Agro-industrial zones and clusters in Africa

The appearance of duty-free and industrial processing zones in African countries goes back to the immediate post-independence era of 1960s when newly independent governments sought to modernize sectors of their economies through manufacturing of

5 As stated in the Terms of Reference (ToR) for this study.

6 SCPZ stems from a national scheme launched by the AfDB President Adesina of the Bank when he was Federal Minister of Agriculture and Rural Development in Nigeria. It was developed and adopted as an AfDB programme in 2016 and transformed into the SAPZ in 2019.

7 These include agro- export processing zones, agro-industrial parks, agro-based clusters and growth poles, agri-corridors, agri-incubators, mega food parks, etc., as elaborated by the FAO in its sourcebook on 'Territorial tools for agro-industry development' (FAO, 2017) and others such as UNIDO and the World Bank.

basic consumption items (e.g. food and beverages) for the domestic market. These early zone-type activities did not stem from deliberate prioritisation of industrial policy as a means of reducing reliance on primary commodity exports and enabling access to regional and global markets but were executed mainly for reasons of national prestige and import substitution benefits. Manufacturing in these zones at the time was not dependent on local agricultural products as sources of raw materials, and little attention was paid to the development of supply and demand linkages with other sectors of the economy. At best, the main economic development consideration was to attract foreign investment for import-substitution production that could save on foreign exchange and to create wage employment. Later, other benefits such as skills training, technological spill-overs and even co-ownership opportunities were envisaged to result from (SEZs)[8] and export processing zones (EPZs).

While there have been mixed results, SEZ and EPZ activities in African countries have not been successful in terms of employment gain and overall development impact (Stein, 2008; Farole and Moberg, 2017). In general, SEZs in Africa have had weak forward and backward linkages, because they may not have been designed in an institutional context that prioritised industrial policy in national development agendas. They have not brought into sufficient consideration the opportunities derived from the continent's physical endowment of land and the potential to supply locally grown crops as sources of raw materials. The expansion of SEZs dedicated to agriculture and agriculture-related activities in many African countries has been rather slow; this, in a way, reflects the neglect of agriculture and chronic underinvestment in the sector.

The initial success of SEZs in Asia and Latin America produced policy analyses from international institutions such as the World Bank, UNIDO, and UNECA that conjured up visions of these zones being a key component of strategies of industrialisation and structural transformation in developing regions (World Bank, 1992; UNIDO, 2012; Stein, 2008). This thinking led to a rush of countries across the developing regions seeking to replicate the much-publicised East Asian model by launching SEZs of their own. The scale of the expansion of SEZs in Africa over the past three decades illustrated is to some extent in Table A1 in the Annex, which presents a listing of different types of agro-industrial zones, parks and clusters in the region. The listing does not include zone-type units and agglomerates that have no direct links with agricultural production and agro-processing activities.

This table has been compiled specifically for this study and is derived from identification of various types of agro-based zones and clusters in Africa listed by country. The purpose is to present a backdrop for contextualising the SAPZ model within a taxonomy of past and existing agro-based SEZs in Africa as part of a broader development strategy in the post-independence era. Later in this study (Chapter 4), a selection of agro-based zones and clusters listed in the table and others, covering farming, intermediate agriculture, fisheries and forestry activities, are examined through synthesised case studies to yield lessons that can inform on guidelines and recommendations for the design, programming and implementation of the SAPZ model.

As can be seen from the Table 1, a variety of terms are used to describe the various types of activities listed. While this study is not concerned primarily with a taxonomy of different types of agro-based zones and clusters and how to differentiate between them, it is useful at the onset to comment briefly on this issue- given the variety and imprecision in the use of terminology in the literature. The activities listed in the table include, first, the following broad typology of zone regime categorised as SEZ[9]: free trade zones (FTZ) which are spatially defined areas in a political unit (i.e. national or sub-national), often next to a port or frontier

8 SEZ, as used here, is a generic term that refers to a geographically designated area where pertinent economic policies, fiscal environment and custom rules, and business regulations are more liberal than in the rest of the country, to attract investment and promote economic growth and development. The scope of an SEZ can expand further than single factory/firm units and extend beyond geographical boundaries.

9 SEZ is used here as a generic term encompassing a broad range of such zone regime types

post, where unrestricted trade including exemption from duties is permitted with the rest of the world; export processing zones (EPZ) which generally go beyond the conditions of an FTZ to include favourable policies and measures (e.g. special customs regimes such as duty-free import and export, fiscal incentives including tax holidays, generous regulations) aimed at attracting investment in manufacturing capacity for export.

Second, since the interest of this study is on agro-based SEZs, implying those located within or with direct links to the agricultural sector, this gives rise to a second typology of zone regime comprising:

i. agro-based clusters which refer to geographical concentrations of and interconnected producers, agribusinesses and institutions that are engaged in the same or related agricultural or agro-industrial subsectors;

ii. agro-industrial parks and/or agropoles which are physically demarcated sites of production and marketing activities, including infrastructure, specialised facilities and services, and logistics, which are centrally managed either by public, private or public-private partnership arrangements;

iii. agri-corridors which are spatial development initiatives established for the coordination of agricultural growth and transformation potential within or between countries or regions, and also between suppliers, producers and distributors in the sector.

For this study, these various terminologies have been used either in specific definitional context, generically or interchangeable as applicable.

In the case of majority of agro-based clusters and zones listed in the table, the "development costs" (i.e. land and physical infrastructure and transport corridors) for establishing them have usually come from the state as part of a wider development strategy aimed at attracting private sector investment, boosting export and creating jobs. The "operational costs" (i.e. ownership of businesses including facilities and equipment and management) have primarily been met through private sector investment comprising a mix of foreign direct investment (FDI), either entirely or in partnership with domestic investors, domestic investment funding (e.g. in SSA South Africa, Namibia, Mauritius and Kenya), public-private-partnership (PPP), and the occasional wholly publicly funded.

There have been other instances of SEZ project funding coming from bilateral donors and international and regional multilateral financial institutions, such as the IFC/World Bank and the AfDB (e.g., the AfDB funding of the Agro-food processing zone in Togo). Additionally, SEZs have resulted from co-financing arrangements between financing institutions such as the AfDB and Korean Exim Bank and with support from international development cooperation agencies such as involving the EU, World Bank and UNIDO. From the standpoint of incentives, in addition to infrastructure and business support facilities, governments of countries listed in the table tend to follow the international practice of offering a wide range of tax and non-tax concessions and inducements to prospective investors, including tax holidays and exemptions from import duties and VAT, provision of state guarantees for loans, subsidies on land and utilities, as well as take deliberate steps to improve the ease of doing business.

Table 1 also includes examples of less formal agro-based clusters of individual businesses in certain geographical areas that result in benefit from economies of scale. Hence, the Republic of Benin, which does not have formalised special zones dedicated to agriculture has also been included in the table on account the large number of non-formalised agro-based clusters in the country. Other examples of this type of non-formalised agglomeration include the horticulture industry in Kenya that is spread across Lake Naivasha, Mt. Kenya, and Nairobi, all the way to Eastern Kenya; the floriculture sector located in clusters along Lake Ziway in Ethiopia's Oromia region; the citrus industry in South Africa which spans across various areas of the Eastern and Western Cape provinces; and cocoa production in West Africa (Ghana, Cote d'Ivoire and parts of Southern Nigeria).

The variety of activities listed in Table 1 attests to the fact that the African continent has seen an increase in SEZ development within the agricultural sector more recently. The strategies and policies driving this development have generally been similar to those found in comparable agglomerations in other developing and in developed economies. However, a review of the agro-based clusters and zones listed in the table indicates a lack of proper contextualising with regards to specific conditions and factors that are critical in driving and sustaining agricultural growth and transformation in Africa. For example, the review of activities examined through the case studies found evidence of weak economic linkages between agro-SEZ typologies and the rest of the economy, policy contradictions affecting planning and operational effectiveness, poor site selection, inadequate regulatory framework, ineffectiveness as an optimal tool for attracting additional investment, and lack of opportunities for skill training. It is in this context that particular attention should be paid to these and other key policy and institutional factors in the design and programming of the SAPZ model.

The poor performance of many of the agro-industrial zones, parks and clusters listed in Table 1 in the Annex warrants a closer and more critical inspection of the

important role that the SAPZ model can play as a development approach. It is obvious that there is a need to design and apply the SAPZ model in a format and within programming parameters that are strategically and operationally different from the organisational, spatial and economic attributes of many of the types listed in the table. This will help to ensure the relevance and effectiveness of the SAPZ model as an innovative and transformational development mechanism. At the same time, as the early experience of some African countries that embraced SEZ typologies as a development tool show, the SAPZ model should not be seen as a panacea for addressing the diverse and complex development challenges of the continent; well-designed and properly programmed SEZ type projects require strategic integration within the wider development process (e.g. inclusiveness and sustainability) and an appropriate macroeconomic policy framework (e.g. competitiveness) to be effective in terms of development impact. Perhaps, one advantage the SAPZ model would have over many of those listed in the table is its justification based on agriculture being recognised as a priority sector in the national development agenda, which has hitherto been the case in generally in Africa.

1.5 Purpose and Scope of Study

This study is intended to serve as a 'knowledge product' to inform the AfDB on the design and programming of the SAPZ model as an agro-industrial spatial development solution for the transformation of African agriculture. As a knowledge product, the study aims to identify and evaluate key conceptual and policy issues, analyse operational and institutional factors, and present and interpret empirical evidence that are relevant to the planning and implementation of SAPZ regime. The study is not concerned per se with quantitative analytics and measurements, and statistics and data analysis are introduced and used mainly for illustrative purposes as appropriate. The study makes use of a political economy theoretical framework for application of the SAPZ model to planning, policy-making and implementation in a practical context, with respect to crucial factors such as government incentives, financing, and benefits. The study presents a selection of abridged case studies drawn from a variety of agro-industrial processing activities across Africa; the aim is to illustrate the scope and possibilities for applying of the SAPZ model to different types of agricultural production in the continent – farming, intermediate agriculture, fisheries, forestry. Evaluation of each of the case studies serves as evidence base for recommendation on strategies, policies and guidelines for planning and operating SAPZs as conceptualised by the AfDB.

The study is structured as follows. First, this introductory section presents a background on the origin, definition, concept and rationale for the SAPZ model as an agro-industrial spatial solution, from the perspective of the AfDB's mandate, operational focus, and comparative advantage for addressing sustainable development challenges. This section also locates the SAPZ model to a taxonomy of past and existing agro-industrial zones and clusters in Africa. The second section seeks to frame the SAPZ model within the institutional mandate and relevant programme parameters of the AfDB. The main purpose of this section is to indicate how the scope and capacity of the Bank's official responsibility and activities in areas such as of agriculture, infrastructural investment, private sector development, industrial policy, etc., as well as its technical assistance programme, can support can the development, adoption and implementation of the SAPZ model in Africa as a flagship programme of the institution. The third section presents a profile of the SAPZ model: it begins with the application of a political economy theoretical framework to the analysis of SAPZ model according to the roles of key actors and processes; and presents and explains a diagrammatic illustration of the model in terms of its concept, operation and outcome. This illustration highlights the global importance of the agro-industrial sector, with special reference to the African region where agro-industrialisation can play a key role responding to the region's challenge to ensure food security, improve agricultural productivity, enhance international economic competitiveness, create and

develop supply and value chains, reduce rural poverty and foster inclusive growth and sustainable economic development. The fourth section of the study evaluates nine descriptive country case studies of different agro-industrialisation experiences in Africa, and highlights 'success factors' and 'pitfalls to avoid' in the design, programming and execution of the SAPZ model. The next section offers relevant lessons drawn from the analysis of the selected countries' agro-industrial performance, which serve as empirical evidence to buttress recommendations and guidelines on SAPZ policy and practice. The final section summarises the results of the study and presents a brief conclusion including key messages and indication of the way forward.

1.6 Sources and Methods

The study was commissioned to be delivered within a relatively short period of time (about three months) and, in the present circumstance of the global COVID-19 pandemic, it was decided that it will be based exclusively on 'desk research' (i.e. no country-level empirical research or structured interviews of key actors). It therefore relies essentially on materials provided for the study by the AfDB, and from official reports and publications from a variety of sources such as FAO, UNIDO, ILO, World Bank, UNECA, OECD, GIZ, etc. and academic literature. Review of relevant reference documents and databases on agro-industrial SEZs and related topics is undertaken to serve as a knowledge base for this study. This makes it possible to connect literature on SEZs in general with related concepts, themes, empirical analysis, and policy framework as applicable to the SAPZ model.

Economic and interdisciplinary knowledge and methods are applied in a technically sound manner, as well as use made of a case-study methodology, to ensure that the analysis is rigorous, robust and comprehensive for: (1) depicting the importance and relevance of the SAPZ model for agricultural transformation, industrial growth and spatial development; and (2) making evidence-based policy recommendations and guidelines concerning the design and programming of the SAPZ model as a spatial solution for achieving economic transformation, inclusive growth and sustainable development objectives.

1.7 Literature Review

There is very little empirical research conducted on the performance of Africa's Special Economic Zones (SEZs)[10] generally, and even less on agro-industrial and processing agglomerates. Most of the existing literature on African SEZs relate to export-oriented processing and production in the manufacturing sector and duty-free ports or zone areas, with only a few on agribusiness and agro-processing activities. For example, Farole (2011) studied six SEZs in sub-Saharan Africa (SSA) and drew conclusions regarding their performance, but none of these included economic activities in the agricultural sector. Similarly, other studies of SEZs in Africa such as Stein (2008), Monga (2011), Greenwald and Stiglitz (2014), and Farole and Moberg (2017) did not focus on agriculture.

This is partly explained by the very low numbers of existing SEZs that are exclusively dedicated to agro-industry and agro-processing. Although there is a growing trend towards planning agro specific SEZs, agro-processing activities often operate in mixed manufacturing SEZs and tend to be more present in Africa (Haile, 2017:185). While a number of African governments are expressing interests in developing agro-focused SEZs to promote agricultural transformation, increase value addition and stimulate multiplier effects through production linkages, most of these remain at the conceptual and feasibility stages lacking the proper legal framework from the inception (Haile, 2017:190).

While the literature on SEZs in SSA is limited, a fairly extensive set of articles and books have been published on experiences in Asia and Latin America and the MENA region that could be instructive for Africa and provide a basis for comparative analysis and making deductions concerning implications for policy and practice. It is important to note, however, that literature on SEZs contain themes that are not divorced from wider issues concerning requirements pertinent to agricultural transformation, agro-industrialisation and spatial development, and transformative structural change - all of which apply to the SAPZ model as conceptualised by the AfDB. Similarly, there are lessons from the experiences of planning and managing SEZs in Africa and elsewhere that are germane and applicable to the SAPZ model (UNCTAD, 2019; Farole and Moberg, 2017). Furthermore, both the FAO (2017) and UNIDO (Yumkella et al, 2011) have published flagship reports on agribusiness and agro-processing that included zone- type spatial organisation of production, distribution, processing, and marketing. These have helped to consolidate knowledge on the different typologies of spatial agro-industrial and agribusiness activities: economic corridors, clusters, special economic zones, industrial parks and incubators, and to measure their capacity to attract and concentrate agro-industrial investments to enhance value addition, create jobs and increase exports (FAO, 2017).

10 SEZ is used here as a generic term that refers to an array of zone-type production and processing activities established to promote economic development and export.

2

Framing the SAPZ model within the AfDB's institutional mandate and programme parameters

This section offers a proper contextualisation of the SAPZ model as a unique spatial development brand of the AfDB. This is done against the background of the institution's mandate and comparative advantage and its analytical and operational programmes. The purpose is to indicate why and how the Bank's official responsibility as the continent's premier development financing institution, and its long experience as a technical agency across a wide range of development activities, qualify the institution to spearhead the design and programming of the SAPZ model as an instrument for achieving agricultural transformation and rural development.

Framing the SAPZ model in the context of Bank's mandate implies, first and foremost that the adoption and application of the model must be linked directly to the institution's longstanding commitment to structural change and economic transformation and governance in support of inclusive growth and sustainable development objectives. Second, with respect to the Bank's development financing and technical assistance functions, the roll out of the SAPZ model should be linked to Bank activities beyond the areas of agriculture and rural development, to include other relevant themes such as infrastructural investment, private sector development, industrialisation, industrial and trade policies, urbanisation, human capital development, private sector development, etc. This is of significance for the Bank's engagement with African countries when focusing on the agro-industrial sector, which is emerging as an important feature of national development agendas in the region. What follows identifies and analyses specific attributes of the SAPZ model in relation to the official mandate. Comparative advantage and relevant financing, technical advisory and operational programmes of the AfDB. In a manner, this analysis frames the SAPZ model within the primary responsibility and capacity of the Bank as the region's leading development financing institution.

2.1 SAPZ as a development approach for structural change and economic transformation

As an institution whose mandate advocates the promotion of economic and social development and poverty reduction, the Bank's justification of the SAPZ model can be linked to the achievement of the UN Sustainable Development Goals (SDGs) and the AU Agenda 2063 by African countries. It can be argued that the implementation of the SAPZ model in a national context can increase the potential of agriculture to become a major contributor to structural change and economic transformation. This can happen when the creation of SAPZs is factored into transformational strategies and policies for raising agricultural productivity, increasing value addition and creating additional jobs in the rural economy, while at the same time serving as a catalyst for leveraging investments for both hard and soft infrastructure in the economy.

Recognising agro-industrialisation as an important component of industrial policy in African countries, and identifying SAPZ as useful transformational tool for unlocking the growth and development potential of the agricultural sector across the region, can contribute towards strengthening national development agendas for responding to opportunities of structural change in the economy. Productivity and output gains brought about by the transformation of agriculture and its integration of agriculture with other economic sectors, combined with value addition through agro-industrialisation, would strengthen linkages in input and output markets, diversify domestic economies and facilitate entry into regional and international supply and value chains.

The significance of the structural change from agricultural transformation for the sustainable development of African economies was succinctly argued by the African Centre for Economic Transformation (ACET) in its second major report published in October 2017:

"Agriculture presents the easiest path to industrialisation and economic transformation [in Africa]. Increasing productivity and output in a modern agricultural sector would, beyond improving food security and balance of payments (through reduced food imports and increased exports), sustain agro-processing, the manufacturing of agricultural inputs, and a host of upstream and downstream services from farms, creating employment and boosting incomes across the economy" (ACET, 2017).

2.2 SAPZ as a spatial solution for rural development and dispersed urbanisation

AfDB envisages that the location of SAPZs in rural areas would provide 'spatial solutions' to the challenges of uneven economic geography posed rural underdevelopment and by rapid urbanisation in African countries. African urbanisation is occurring at the fastest rate in the world, and it is projected by the World Bank that more than half of the continent's total population will be living in urban areas by 2030. This will pose more development challenges for the continent's already overburdened cities. It is therefore important to observe that both the location of SAPZs and improved infrastructure, especially roads and public utilities, and employment opportunities associated with such zone activities provide the foundation for a spatial solution for both rural underdevelopment and rapid urbanisation.

The Bank contends that the location of agribusiness agglomerations in large geographical areas, as implied in the SAPZ model, can serve as a catalyst for the growth of secondary or intermediary towns/ cities within the rural landscape. While spatial solutions dedicated to agribusiness are relatively new instruments in Africa, there are examples from other developing regions that demonstrate their feasibility and relevance for balanced development (Oyelaran-Oyeyinka and Lal, 2017). These examples from elsewhere show that SAPZ-type growth poles have the potential to develop competitive export-oriented value-addition agribusinesses that have beneficial linkages to local producers and with other sectors of the economy, and connections with regional and global supply chains.[11]

Lessons from existing spatial solutions can be applied to the planning and operation of SAPZs to ensure that an increasing share of the burden of the rapid urbanisation trend in Africa will be channelled to new growth poles and, thereby, lead to a more dispersed pattern of urbanisation. Already, evidence from the case studies of Ethiopia and Morocco shows that intermediary cities and agro-growth poles acting as processing and marketing hubs for agro-industrialisation activities are not only appearing on the rural landscape, but are precipitating economic and social changes that make these locations attractive to local rural youth who otherwise might have been drawn to the capital or other established urban centres to look for work (OECD, 2020b). These changes present a range of opportunities for structural transformation through agro-industrialisation to result in greater economic diversification and a more balanced pattern of urbanisation.

2.3 SAPZ as basis for an industrial policy

The adoption of the SAPZ model is rooted on the prospect of introducing and enhancing agro-industrialisation as an important cog of industrial policy. It is therefore important to relate the design and programming of the SAPZ model to an appropriate and prioritised industrial policy in the context of the wider development process. In addition, it has been argued that industrial development based on agriculture is less harmful to the environment and climate change challenges, compared to manufacturing-led and extractive-based industrialisation. Evidence to support this view comes mainly from a UNU-WIDER research on so-called "industries without smokestacks", which are identified as drivers of industrial locations in the context of a strategy for structural change that encompasses both economic transformation and environmental protection (Page, 2020; Newfarmer, Page and Tarp, 2018)

From this standpoint, SAPZs can play a decisive role in refocusing industrial policy on agribusiness as a legitimate strategy for structural transformation and sustainable development in Africa. This is appropriate, as it appears that the time has passed for Africa to base its industrial development strategy exclusively on an East Asian-type export manufacture growth model. As Stiglitz observed in a paper presented in 2018 at a UNU-WIDER Conference in Helsinki, the East Asian model will not be working in the future to the extent that it did in the past (Shipp, 2018). The main characteristics of the SAPZ model are reflected in strategies for agricultural-led economic transformation in Africa, as outlined by major United Nations development agencies. The FAO, which defines agro-processing as a "subset of manufacturing that processes raw materials and intermediate products derived from the agricultural sector" (FAO, 1997), considers agribusiness as an industry that transforms and adds value to products originating from the agricultural sector. UNIDO, in its 2011 flagship publication 'Agribusiness for Africa's Prosperity', underlines the importance of agribusiness for inclusive economic growth and sustainable development. (Yumkella et al, 2011).

2.4 SAPZ as a stimulant for infrastructural investment

Although agriculture in Africa is predominantly a private sector business, its success is likely to be determined by public investment in physical infrastructure and human capital development and adequate capacity of government institutions for regulation of private investments. Improved physical

11 The experiences of South Korea and China stand out in this regard, but other examples exist in Middle East and Central America.

and institutional infrastructure, especially roads and energy, and logistic services and aggregation that facilitates transition to value-addition activities through agro-industrialisation represent important drivers of agricultural transformation.

AfDB's core business has traditionally involved the financing of strategic and transformative infrastructure projects within and between African countries, and certain investments in infrastructure and logistic services that affect or impact on growth in the agricultural sector. Transformation of the sector based on agro-industrialisation, as envisaged in the SAPZ model, provides an opportunity to directly and indirectly relate to the Bank's portfolio of infrastructural investments to the development of agricultural value chains, as in the case of cross border road projects for supporting transport corridors and power generating ventures that address gaps in electricity supply for operating SAPZs. Furthermore, infrastructural investments support regional integration objectives in addition to creating a conducive environment for implementation the SAPZ model. Within the Bank's infrastructure portfolio, and its supporting technical assistance and capacity-building activities, the SAPZ model can be identified as a good example for ensuring that investments are linked to value chain development and upgrading and opportunities to facilitate intra-African trade and increase overall development impact.

2.5 SAPZ as a catalyst for private sector development

The private sector is identified by AfDB to play a key role in mobilising investment for the development and implementation of SAPZs. The Bank has supported private sector development in Africa because of the its potential to drive and sustain economic growth in complement with public sector efforts. In the case of the SAPZ model, as can be deduced from review of past and existing SEZ type regimes in Africa (reference Table 1 in Annex), the private sector is likely to be the main source of strategic investments to finance agro-industrial processing activities. AfDB envisages that the participation of the private sector in the operation and management of SAPZ activities will include both foreign and domestic private investments comprising a mix of large, medium and small-scale investors. In addition, it is hoped that local micro and small enterprises (MSEs) would be involved in the operation of SAPZs.

There are already indications of the responsiveness of the private sector to investment opportunities in agribusiness in SSA. Increase in demand for high-value fresh and processed food among Africa's growing urban middle-class consumers is driving aggregate investments in agri-food processing in several countries. Evidence of this trend is provided by the presence of well-known multinational corporations (MNCs) and global brands, independently or in joint ventures with local firms, investing in agribusiness in Africa. These include Nestle, Unilever and Cadbury in food processing plants in Ghana and other parts of West and Central Africa; Olam in rice production in Nigeria; Danone and Parmalat in dairy processing in Kenya and Southern Africa; and Cargill's in food processing including crushing of soybean in Zambia and Southern Africa. These investments represent an example of how the SAPZ model can be adopted to trigger private sector participation centred around large FDI–funded processing businesses with links to local producers and suppliers. Of relevance to this model for engaging the private sector is the role played by government in some instances in liberalising and privatising markets (e.g. Ethiopia and Mozambique) and in building an initial base of critical incentive factors including infrastructure and business support services and market access (e.g. Mauritius, Kenya, Angola).

The above examples provide evidence that private sector-managed agro-industrial activities in Africa have the potential to produce competitively for domestic and external markets under appropriate incentives and regulations by the public sector. This type of favourable coexistence of the private and public sector is justification for assigning a key role to the private sector in the operation and management of SAPZs. It is worth pointing out that this approach contrasts the immediate post-independence experience when state enterprises dominated early import-substitution manufacturing in some African countries (e.g. Tanzania, Ghana) and, thereby, crowded out the private sector. The main lesson from that era is that the public sector was not well equipped and intrinsically disposed to manage commercial enterprises efficiently and profitably, compared to a more business-oriented and profit-motivated private sector.

2.6 SAPZ as a support for regional integration and value chain development

AfDB's commitment to transformation of African agriculture is tied to achieving greater productivity through value addition that upgrades agricultural products into higher value goods for the domestic market and intra-African trade. The impact of SAPZs on value chain development and upgrading can be boosted by the Bank's comparative advantage in promoting regional initiatives especially in relation to cross-border infrastructure development and multinational logistics projects. The progressive implementation of the African Continental Free Trade Agreement (AfCFTA) should provide leverage for stimulating agro-industrialisation-based value chain development facilitated by free trade between countries. In this regard, AfDB can link design, programming and implementation of the SAPZ

model to large regional projects that provide a cost-effective way to address capacity gaps in physical and institutional infrastructure needed to drive value chain activities and facilitate cross border marketing and trade activities.

The locational advantages of SAPZs, for example in frontier regions and around regional trading hubs, can help to increase productivity across a wide range of value chain operations and improve access to external markets. At the primary production level, regional initiatives could incentive producers across borders to gain a net marketable surplus that is required for the supply of raw materials to SAPZ units. At the upstream level, both hard and soft infrastructure, such as roads and power generation and regional agricultural and rural transformation and training centres could contribute to knowledge about irrigation facilities and improved seeds and boost overall capacity-building to support better agronomic practices. At the downstream level, regional initiatives could result in targeted coordination support to processing, distribution, wholesale, packaging and retail firms and other downstream functions in the value chain, including transport, handling and logistics services.

Agricultural transformation and value chain integration supported by regional initiatives can bring about different opportunities for economic upgrading in African countries seeking to enter higher-value agro-industries connected with regional and global markets. But it can also result in inequality in the distribution of value added between actors in different locations nationally and regionally, and at different functional segments of the agricultural value chain, despite expectations of the contrary (UNCTAD 2016; Vilakazi and Ponte, 2020). This is why governments must play an important role to supporting value chain processes linked to SAPZs through facilitative, regulatory and distributive interventions that range from industrial policy to public procurement support and close monitoring of outputs to ensure value-added gains increase in the domestic economy.

2.7 SAPZ as a strategy for promoting inclusive growth

The conceptualisation of the SAPZ model by AfDB advocates the participation of local producers and agribusinesses in agro-industrialisation operations. This is in line with the Bank's overall economic development and poverty reduction mandate that implies widening participation in development activities and benefits, in pursuit of a more inclusive pattern of growth based on the interaction of government, the market, and society. This process should include the effective and beneficial participation of small-scale farmers and micro and small enterprises (MSEs), including women, as intermediate agricultural producers, input suppliers and processors in agro-industrial production,

distribution and marketing activities. The role of the state as an enabler as envisaged in the SAPZ model goes beyond merely 'enabling' the private sector to invest, to include regulatory and business support functions that facilitate the participation of MSEs in SAPZ projects. Similar to the 'development state' strategy that is credited to have transformed East Asian economies, African governments can play an important role in providing 'enabling conditions' for the implementation of SAPZ operations in a manner that meets transformational and societal needs.

The SAPZ model should assume a catalytic role in the agricultural transformation process that fosters better integration of emerging micro and small enterprises (MSEs) into both downstream and upstream activities that help to upgrade agro-industrial production to achieve greater economic complexity, export potential and learning opportunities at the farm and off-farm levels. Value chain financing for all categories of actors in agribusinesses can further facilitate inclusion of MSEs and, possibly, reduce the cost and spread the risk associated with agricultural financing. Inclusion through expanding the range of actors across the entire range of agriculture value chains could make financing and other productive resources easier to access, and specifically benefit small-scale producers and local agribusinesses on a competitive advantage basis.

2.8 SAPZ as a conduit for human capital development

A major challenge with respect to the deployment of SAPZs concerns skills development and upgrading across the agriculture and agro-industrial value chains. In addition to measures to increase labour productivity, effective labour market planning must consider requirements for the implementation of SAPZs, in the sense of supporting skills formation and entrepreneurship training needed for putting labour to productive use in agriculture and agribusiness. The bridging of sectoral and occupational skills gaps in the agricultural sector on an internationally competitive basis is necessary for attracting foreign investments. Government should include relevant skills training as an important component of its business support strategy for attracting investments in SAPZs and building overall industrial capacity within the economy.

Matching skills supply and demand is essential for supporting employment growth and requires effective labour market planning. Education and training systems are key to skills supply, and in this regard, government must ensure that national curricula make provision for the incorporation of sufficient quantum and variety of technical and vocational training at appropriate levels in the education system. It would be most encouraging if the expansion of SAPZs and similar operations could serve as a catalyst for reform in education and training towards international competitiveness for attracting investment. In reforming education and training systems to meet the skills need of industrial capacity, it is advisable for government to consult with employers and prospective investors to determine the types and levels of training that should be prioritised, as well as provide support for apprenticeship and on-the-job training by the private sector. These are issues and areas that fall within the competency of the AfDB.

It is reasonable to assume that future skills demand for agro-industrial development across SSA will be shaped by a combination of factors including investment opportunities for the private sector, trade liberalisation, technological development, and demographic change. In the case of large-scale export oriented SAPZ enterprises, employers are likely to seek employees who have skills in digital and information and communication technologies that will make it possible for their businesses to engage in complex supply chains which cross national boundaries. The growth of digitalisation in agriculture and allied services requires additional and different type of skills which should be reflected in the reform and development of education and training curricula. This is in addition to workers required in SAPZs for low skilled processing and packaging work where the key requirement of employers will relate to higher labour productivity.

The growth of successful SAPZs across Africa coupled with active labour market planning could help nurture a different educational path to productive and remunerative employment for many new entrants into the workforce. Consequent increase in the demand for agribusiness and agro-industrial skills in SSA countries could contribute to a change in existing popular preferences for humanities-oriented educational qualifications towards vocational, technical and business education and training. It can be argued that the SAPZ model could be a force in the creation of an internationally competitive workforce in the region with job prospects for new entrants into the labour market. Furthermore, the job creation potential of the agro-industry sector is identified with environmentally-friendly production practices, compared with traditional "smokestacks" export-led manufacturing (Owoo and Page, 2017), which is an interest of the AfDB.


3

Profile of the SAPZ Model: Theoretical and Operational Framework

3.1 Applying a Political Economy Theoretical Framework to the SAPZ Model

Political economy models are essentially about 'vested interests' in which the different actors, i.e. governments, institutions, businesses, households and individuals, within a given society or context have their own goals and asymmetric concerns that determine their focus and action in transactional interaction with each other (Boettke, 1998; Basu, 2000). When applied to the interplay among government agents and non-state market actors, a political economy theoretical framework assumes that collective decision-making will be based on principles of incentives and benefits. In the absence of alignment between incentives and beneficial policies, or when assumptions of rational self-interest of policy-makers conflict with the profit maximising and personal gain goals of non-state market actors, use may be made of negotiation among the parties for decision-making (Buchanan and Tullock,1962). Negotiations could result in a reality-based application of political economy theory, which may not automatically be in the interest of the state or the common good. It could also result in policymakers exploiting their positions of authority to engage in fraudulent and corrupt practices for personal gain and against the interest of the state and society.

In the context of SEZ[12] investments, negotiation toward decision-making would involve actors representing host governments, on one side, and private sector investors and related interests, on the other. Usually, the negotiations and decisions therefrom are influenced by choices of incentives and benefits linked to different vested interests. Applying a political economy theoretical framework to negotiation between host governments and the private investors in African SEZ programmes does not only require an alignment between incentive and beneficial policies but also convergence in differences between information, knowledge and power of the two parties. The right regulatory framework and institutional environment can align the self-interest of the state while still benefiting the public and allowing market actors to allocate resources for operating and managing SEZ projects even when they possess superior knowledge to do so.

In the case of the government, SEZ policies should be shaped by a desire to obtain inclusive economic growth and sustainable development benefits (e.g. industrialisation, export promotion, revenue and employment gains), in the interest of the common good. The decision of the private sector is likely to be influenced by assessment of incentives offered by government and the prevailing policy environment in relation to possibilities for productivity gains and prospects of operating a secure, profitable and sustainable business. Based on its presumably better knowledge about business-related realities, the private sector tends to avoid or minimise risks relating to current or anticipated adverse political conditions and economic uncertainties.

Political economy attributes and dynamics are useful for explaining success or failure as well as for suggesting possible solutions to problems. The right policy environment and regulatory institutional framework make it possible to align the self-interest of public policy-makers and society with the aim of the private investors and the market, while benefiting the state and its citizenry (via revenue and transformative economic development), on the one hand, as well as bringing commercial rewards to private investors. In contrast, weak governance and rent-seeking practices by the state apparatus, incompetent and inefficient bureaucracies, insecurity, poorly designed legal and regulatory framework, distorted incentives and insufficient quality infrastructure can hinder investments and minimise benefits. These problems can result in outcomes that stifle efforts towards promoting inclusive growth and sustainable development, and maximising social welfare.

With respect to action by private investors, underperformance and failure of SEZ projects can stem from inadequate funding, weak management capacity, inadequate knowledge of the industry/sector and market, lack of corporate governance as manifested in distorted incentive demands, tax evasion and illicit revenue outflows, etc. These practices can cost the state huge losses in terms of revenue and developmental resources. Political economy problems emanating from both the state and the private investors in the design and operation of the SEZ projects can be avoided or minimised by paying particular attention to

12 SEZ is used here as a generic term that encompasses a broad range of spatial economic development models including agro-industrial clusters.

the nature and functioning of the legal and regulatory institutional frameworks, so as to ensure the right balance between incentives and benefits. Attention should also be paid to the mitigation of possible risks through ensuring sufficient government capacity for institutional and inter-sector coordination, and ability to propose reforms to facilitate the search for solutions on key questions (e.g. energy, transport, communication, and water, waste management) involving various institutions and stakeholders.

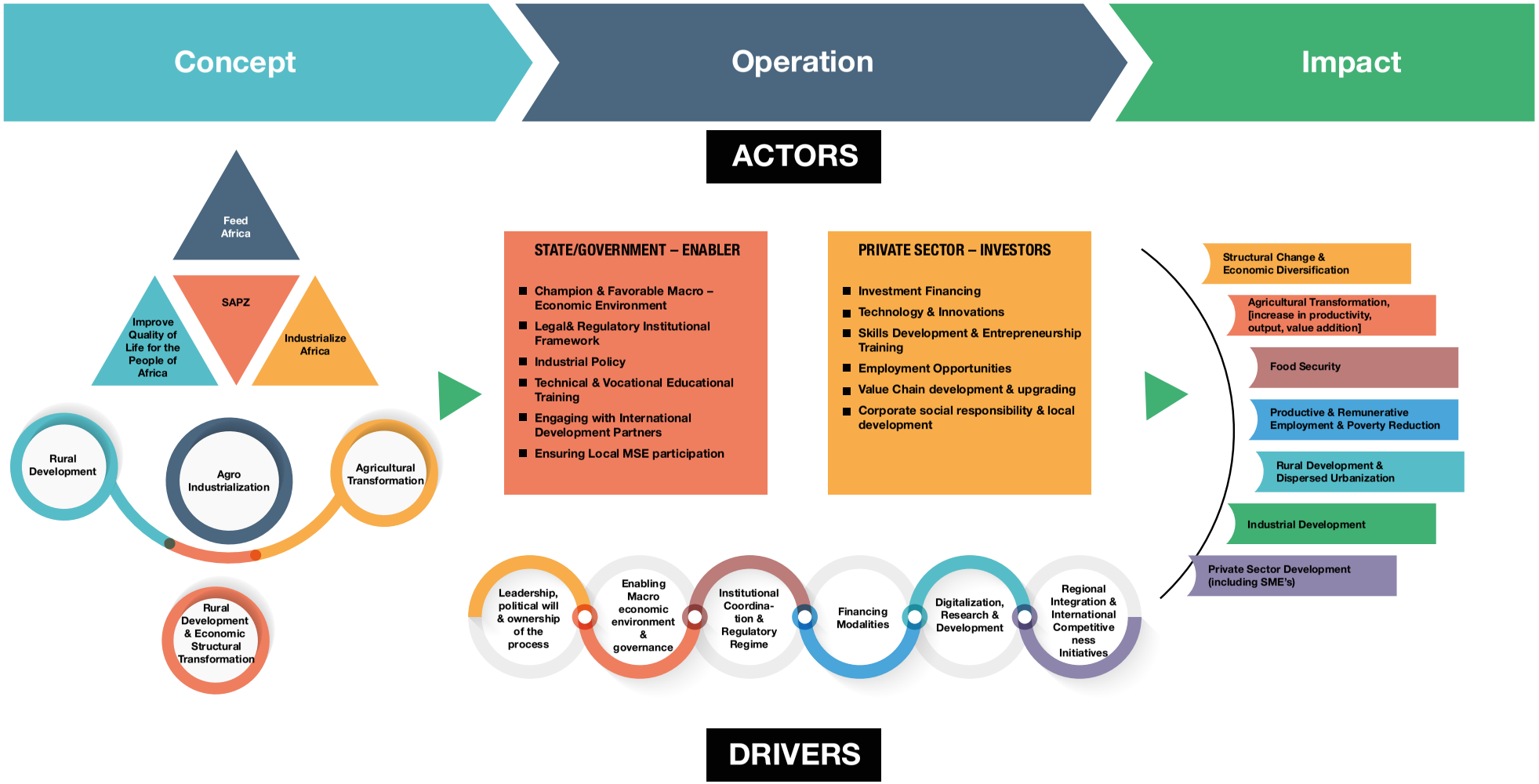
From a broad development perspective, the political economy framework can influence the design and reform of trade, investment, and spatial industrial policies, all of which in turn directly and indirectly affect the performance of SEZs. Because political economy issues are context-specific, the framework can be applied to the execution of the SAPZ model at national and subnational levels as well as in the case of cross-border regional projects. However, it should be noted that implementation of the SAPZ model between and across different tiers of government or administration, such as federal, national, regional, provincial, district and municipal, will require effective coordination between the different levels of decision-making.

In determining political economy-framed policy implications for successful performance of the SAPZ model, it is important to distinguish between symptoms and causes of success or failure. Political economy insights would indicate that what is commonly identified as the reasons for success, such as quality infrastructure, conducive business environment and advantageous location, are in fact symptoms of the very important requirements of good governance, strong institutions and robust regulatory regimes. These vital requirements, for example, make it possible to align incentives with benefits and to take the right policy decisions that crucially affect SEZ performance and outcomes.

Lessons from the experiences of the case examples presented and analysed in the next chapter offer insights into how success or ‘good practice’ political economy factors can be replicated and enhanced, as well as provide indications of what can be done to mitigate political economy problems associated with the design and implementation of SEZs. Adapting a political economy framework to the case studies highlights key problems stemming from discrepancies in capacity and power and different vested interests between host governments and prospective private investors, including in particular information and knowledge gap between the main actors (i.e.). The findings of the case studies should help to shed light on approaches to the important political economy challenge of reconciling different vested interests towards the realisation of wider economic and social outcomes as illustrated below in the diagrammatic presentation of the operational context of SAPZ model.

3.2 Operational Context: Design and Programming of the SAPZ model

Figure 1: SAPZ Model: Concept, Operation and Outcome



Explanation of the SAPZ Diagrammatic Model [Input-Output format]

Table 2 below presents an input-output model of the conceptual framework in Figure 1. The SAPZ concept, is firmly situated within the High 5s of the Bank's strategic vision, with direct linkage to, and impact on, the three of the 5s – Feed Africa, Industrialise Africa, and Improve the quality of life for the people of Africa. The over-arching aim of the concept is agro-industrialisation with spill-over effects on rural development, agricultural transformation, spatial development and economic structural transformation.

The concept functions within a political economy framework comprising of various interacting actors who make specific 'inputs' within the mandate of the SAPZ, and salient macro drivers/pillars which significantly affects the intended outcomes. The roles of the actors are interdependent and not divorced from the factors required to drive the successful implementation of the model. These actors are broadly defined as the State/government (whose role is as an enabler), and the private sector (whose role is the investment of both tangible and intangible resources).

The specific expected outcomes of a successful SAPZ model, taking into consideration the local, regional, and global political economy dynamics including food security; structural change and economic diversification; private sector and MSE development; increased productivity, output, and value addition; productive and remunerative employment, rural development and dispersed urbanisation; and poverty reduction.

For a given country, K, implementing the SAPZ model at time t, with n SAPZs distributed within the country, and considering j political economy factors (PEF); the output/impact, OUT, is given by the generic model:

$$OUT_{K,t} = f\left\{\left(\sum_{n=1}^{N} \psi_n \, SAPZ_{n,t}\right), \left(\sum_{j=1}^{M} \varphi_j PEF_{j,t}\right)\right\}, \text{for } n = 1,2,3,\dots,N; \text{and } j = 1,2,3,\dots,M$$

... equation 1

Where:

For a country with one SAPZ (i.e. where $\sum_{n=1}^{N} = 1 = K$), the outcome of the entire country will be equal to the outcome of the single SAPZ.

ψ is the weighting factor assigned to each SAPZ, and φ is the weighting factor assigned to each PEF.

The functional form $f\{.\}$ is not given, and the measure of each PEF and all assigned weight is country specific.

The econometric methodology for evaluating equation 1 and denoting the functional form is flexible, and user dependent.

The choice and measure of the input factors to evaluate, as well as the PEF factors, for equation 1 will depend on conceptual and theoretical interpretation of each factor, as well as the availability of data to measure each factor.

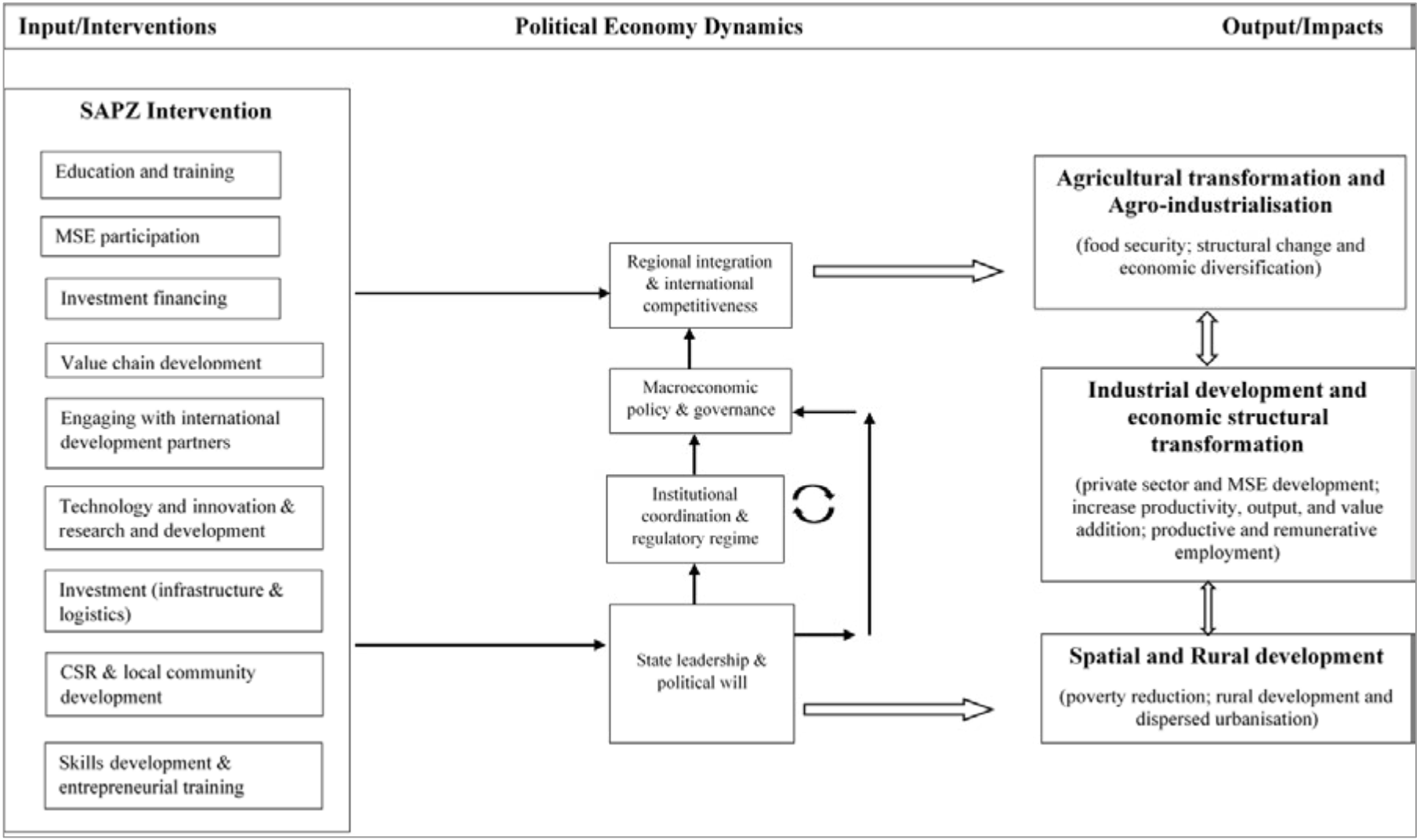


Figure 2: Input-Output model of the SAPZ Concept

3.3 Analysis of Key Policy and Institutional Factors: Actors and Driver

(i) The State as an 'enabler'

Two forces will drive agricultural transformation in Africa: first, a combination of rising labour and land productivity that increases production beyond subsistence; and, second, improved physical infrastructure, especially roads and energy, and logistic services and aggregation that facilitates transition to value-addition activities through agro-processing and agro-industrialisation. The role of the state as an 'enabler' is crucial to the success of SAPZs with respect to an environment that encompasses official development strategies and policies, government institutions, and public sector investments in physical and human development capital. This important requirement is clearly illustrated in the diagram and outlines what governments throughout Africa need to do to achieve agricultural transformation and overall sustainable development. There is an urgent need to strengthen the resolve and capacity of governments across the region to implement requirements that portray the enabling role of role of the state for the planning and operation of SAPZs.

The main requirement regarding the role of the state as an enabler for the development and operation of SAPZs concerns the ability to attract private investments. This is a multifaceted requirement that encompasses a range of political, macro-economic, institutional and governance responsibilities. First, leadership and political will at the highest level is crucial for concentrating on agriculture and rural development in national development agendas and for championing the cause of agricultural transformation. This is crucial for success of SAPZs, given the longstanding bias against agriculture as a priority in national development planning in the region. Commitment to agriculture in national development must be backed by government allocating sufficient resources to the sector,[13] as well as providing a conducive policy environment both for transforming agriculture and attracting private investments. It also implies the ability to coordinate allocation of resources and institutional functions across government in a manner that enhances the role and significance of agriculture for national development objectives including poverty reduction.

Additionally, there is a need for the state to put in place measures aimed specifically to ensure the effective participation of small-scale farmers and micro and small enterprisers (MSEs) in SAPZs. Thus, the state can make use of its legal framework and institutional regulatory agencies to ensure that private investment for SAPZs contribute to inclusive growth and development. These should include support for agricultural extension services, credits and marketing services, as well as putting in procedures to prevent the exploitation of small by large enterprises in transactions. This role of the state is crucial for promoting inclusion as a means of reducing rural poverty (Mellor, 2018).

Second, with reference to external support from international development partners like the AfDB, FAO, World Bank and donors, it is important for African governments to ensure that the assistance offered is transformative and, more specifically, in line with the development goals and priorities of government (AGRA, 2018). AfDB has played a critical role in supporting government efforts to prepare sustainable and quality infrastructure projects that facilitate private investment. The Bank's interactions with industrial development via infrastructural investment and regional development has been recognised (Ikpe, 2020; AfDB, 2013). These infrastructural investments, ranging from cross-border road corridors to crosscutting energy projects, aim to support larger, more attractive African markets, improved intracontinental trade and global exports. The SAPZ model can harness these existing infrastructure projects financed by the AfDB and make use of integrative development outcomes.

Furthermore, governments should seize the opportunity provided by relevant African Union (AU) initiatives, such as the Comprehensive Africa Agriculture Development Programme (CAADP) and the recently adopted Africa Continental Free Trade Agreement (AfCFTA), to apply guidelines from these continental frameworks to their efforts to transform agriculture and promote agro-industrialisation and for boosting inter-state development collaboration and regional economic cooperation.

(ii) Private investors

AfDB envisages that the participation of the private sector in SAPZ operation will include both large investors as owners and managers of primary processing and production units and medium and small-sized businesses whose involvement could cover the entire range of 'up or mid-stream' (i.e. processing and logistics) and 'downstream' (distribution and marketing services) activities. As already observed, the incentive for stimulating private sector investment and participation in SAPZs should come from the public sector in terms government-led enabling strategies and conducive policy environments.

The experiences of transitional development models in Asia (e.g. Thailand, Singapore, Malaysia, Sri Lanka

13 This can be measured using indicators such as the percentage of agricultural expenditure in total government expenditure and other types of agricultural orientation index which measure public investments in agriculture.

and Indonesia) and Latin America (e.g. Costa Rica, Dominican Republic and Chile), and to a lesser degree in the Middle East and North Africa (e.g. Jordan, Bahrain, Morocco, and Tunisia), suggest that motives for mobilising private investment drive government's policy and incentive for SEZs, including ensuring appropriate factor conditions in input and output markets, adequate institutional and technology arrangements, and sufficient business support services (Signe, 2020). The SAPZ model, as conceptualised by the AfDB, is intended to make use of the private sector to undertake "value-added" initiatives through agro-industrial activities.

The Bank also seeks to encourage the private sector to operate and manage agro-industrial zones, parks and clusters and take on branding, marketing, technology transfer and expansion activities under regulations and incentives provided by public sector agencies. The Bank believes that the private sector will function to its optimal capacity as an investor and innovator when it co-exists with the state in a complementary manner in ensuring sustainability of SAPZ operations and in line with international best practices. Evoking the 'developmental state' model of East Asia for boosting agglomeration activities, an important dimension of the multiplicity of roles of the state as an enabler should be the implementation of policies that support wider participation and greater inclusion of local businesses in SAPZ-type operations.

Examples of successful agro-industrial zones from Asia (China, India Vietnam), Latin America (Brazil) and Europe (the Netherlands and Denmark) show that the effective participation of local small businesses in SEZs require specific measures to nurture and sustain tangible economic linkages that could yield benefits in terms of income and employment and local level development towards a more inclusive growth pattern. In SSA, where the population remains predominantly rural and agriculture continues to be the main source of employment, it is important from a poverty reduction perspective to promote the inclusion of small-scale farmers and small medium enterprises (SMEs) in the operations and outcomes of SAPZs. The AfDB therefore advocates specific measures to encourage and support the participation of SMEs in the growing value-added agro-processing segment of the agricultural sector.

In addition to the domination of small-scale farmers in African agriculture, empirical evidence from several African countries shows the existence of informal and unplanned "spontaneous" clusters involved in the supply of raw material inputs from farms, agri-food processing, distribution and marketing activities especially in peri-urban and intermediate rural areas and around transport stations and road intersections (AGRA, 2019). The main challenge, however, is how to entice enterprises in these spontaneous clusters and other MSEs in the agriculture sector to operate from within more formalised and managed spatial economic zones such as SAPZs on what they perceive to be advantageous and beneficial terms.

The processing segment of the agricultural sector is poised to undergo dynamic transformation in SSA, as the food system grows and adapts to expanding urbanisation and an increasing middle-class. The SAPZ model, defined by the AfDB as an "integrated (demand and supply side) agro-industrial ecosystem comprising production, processing, distribution and marketing", constitutes an appropriate typology that can assist small-scale farmers and agro-based SMEs to benefit from agglomeration, including economies of scale and scope in processing (e.g. access to

common facilities and services within the zones), reduced transaction costs of accessing markets to the provision of a "one-stop-shop" to retailers, improvement in labour/output ratios, facilitating the transition from a "parallel market" dominated by informal SMEs to being part of an integrated formal production system, and precipitating a shift from self-employment to wage employment as businesses expand.

The products of SMEs within an SAPZ may occupy a highly local and traditional niche that larger businesses no longer find easy and profitable to penetrate, which in turn gives SMEs some form of 'protection' against better-resourced competitors. At the same time, operating within the same agglomeration that includes larger and more advanced enterprises could serve as an example and incentive for the smaller agribusinesses in the zones to adopt know-how and technology necessary to raise their efficiency and productivity and enable them to compete outside of their traditional and most accessible markets.

While the Bank favours a commodity-based approach as one of the conditions for SAPZ locations, it also advocates for separate and newer small production ventures including microprocessors which can take advantage of certain comparative advantages to produce, supply and process commodities for a niche market. Experience of this is emerging in Ethiopia where micro and small-scale investors are processing avocado oil and honey in a zone where coffee and cereals were considered the main market commodities. Another dimension to support inclusion of local businesses in SAPZ operation involves enabling small farmers to meet the needs of agro-industrial processing businesses for raw material supplies, rather than the use of imported inputs. Enabling conditions by the state for spontaneous clusters of small-scale input suppliers and traders/ stockists in local wholesale markets similarly can be instrumental for leveraging value-chain investments by SMEs within SAPZS and, thereby, support inclusive agricultural transformation and growth.

Traditional government-sponsored cooperatives, which in the past helped small-scale farmers pool their resources to benefit from economies of scale in procurement of inputs, production, storage, distribution and marketing activities, can be revived to serve as a mechanism to link and directly involve small-scale farmers in agro-industrial processing and agri-food value chain activities (AGRA, 2019). More recent and innovative financing instruments like the IFC/FAO-sponsored 'Crop Receipts Initiative' (IFC/FAO, 2019) can be employed to provide short-term revolving credit and value chain finance for investment in local processing capacity (i.e. machines for processing and packaging).

(iii) Financing modalities

With respect to financing of SAPZs, review of past and existing agro-industrial zones shown in Table 1 in the Annex indicates that "development costs" associated with initial location expenditure and physical infrastructure for zone-types projects are generally linked to development programmes of the state independently or with assistance from external development partners. "Operational costs" (ownership and management of enterprises in the zones have been covered by a mix of private sector participation – comprising foreign direct investment (FDI), entirely and/or in partnership with businesses, domestic investors, and through public-private-partnership (PPP) ownership arrangements involving equity participation by both parties. The private sector can also source funds for investment in SEZ operations from special facilities of international and regional multilateral financing organisations like the World Bank/IFC, AfDB, Africa EximBank, and Chinese and Korean EximBanks. There are also instances where SEZ projects have been owned and managed exclusively by national or provincial and municipal governments through designated parastatal agencies.

AfDB's 'preferred' financing arrangement for the SAPZ model is for the government to take responsibility for providing physical infrastructure and common facilities and services as needed for establishing the zones, and private sector investment mobilised for ownership and management of agro-processing enterprises. The Bank is interested in value chain financing to support widening participation of SME actors in agribusiness and reduce the cost and risk associated with financing of agriculture. AfDB advocates that financing for operating businesses within SAPZs should include special schemes for mobilising resources to fund the participation of smallholders and SME suppliers, processors and distributors.

There are good reasons to believe that conditions are alluring for mobilising investment to finance agribusinesses including agro-based SEZs in SSA. A confluence of factors inherent in the overall development process of countries in the region, such as rapid urbanisation, growing middle class and rising income, improved transport networks and growing cross-border trade, create demand conditions that can attract investments aimed at supplying domestic and regional markets for agro-processed products. Operating within the context of a SAPZ adequately served by infrastructure and common facilities should prove attractive to different categories of investors in agro-industrial processing and agri-food industry, especially for overcoming procurement constraints and reducing transaction costs of local supply chains. As already mentioned, the AfDB could situate the design and programming of the SAPZ as an internationally competitive model around existing regional road and

energy infrastructure projects funded by the institution. The Bank is committed to advancing the mobilisation of private sector investments for transformational development projects in the region through its sponsorship of the African Investment Forum, which is dedicated multi-stakeholder platform for raising capital and financing bankable projects from inception to closure.

Other possible sources of finance for SAPZ-type infrastructural support and operational projects exist. China's 'Belt and Road Initiative' (BRI), which also targets SSA countries, could be relevant to infrastructural investment for supporting the development and sustainability of SAPZs. Furthermore, China's growing presence in Africa since the early 2000s in terms of trade and investment, and its own experience of establishing strategically located special economic zones across the country as a foundation for its rapid economic transformation, make it a potential source of investment in the implementation of SAPZ model and similar projects for enhancing agro-industrial output supply and value chains (Brautigam and Xiaoyang, 2011). The new EU-Africa strategy to be adopted at the next AU-EU summit to replace the Cotonou Agreement in 2020 includes proposal for financing of infrastructural and digitalisation projects. The core development mandate of the newly established US International Development Finance Corporation (DFC) includes provision for investment in infrastructural and industrial development projects, and for channelling desperately needed capital into the hands of small business owners in Africa and other emerging markets across the globe.[14] Within the framework of Japan's regular Tokyo International Conference on African Development (TICAD) – a high-level policy dialogue between African leaders and development partners – there is scope to support infrastructure development and economic diversification which are relevant to SAPZ type projects, as an evolving element in Japan's long-term commitment to fostering development Africa.[15] All of these types of development partnership are possible channels for financing productivity-boosting activities in the agricultural sector and for transferring technology and knowledge through training and capacity building, and linkages with the local economy in African host countries.

Diaspora investment is also becoming a recognized source of financing for scaling up agribusinesses in several African countries. There are examples from investments in agribusiness in Ethiopia where diaspora

14 DFC approved two transactions totalling $1.7 billion to support economic transformation including infrastructure development in September 2020.

15 Japan announced a five-year $32 billion package to support infrastructure development and boost economic growth in Africa during TICAD-V in Yokohama in June 2013.

investment, as distinct from remittances from abroad, have been critical in helping smallholder coffee farmers grow their businesses by improving the quality of their crop outputs for pre-destined export markets and thereby improve their profits and incomes. Diaspora organisations like the North American-based African Diaspora Network enable the engagement of Africans in the diaspora and facilitate direct collaboration with social entrepreneurs, innovators and business leaders to provide investment capital for African-led agro-based start-ups and small and micro enterprise supply and value chains.

(iv) Legal, regulatory, and institutional framework

It is important that government should be able to respond adequately to governance challenges associated with the establishment and operation of SAPZs, particularly those that concern strategies and policies for engaging the private sector and for managing relationships with investors and other non-state actors. It is in this context that the legal, regulatory and institutional framework comes into focus, which should be clarified with respect to key requirements. First, there is a need for the legal framework to be robust with regards to enforcing contracts, but also predictable for the purpose of attracting and protecting investments and resolving disputes. Second, with the aim of ensuring a conducive business environment, the legal framework should be supplemented by regulations that improve the ease of doing such as through reduction in the cost and time of setting up a business, obtaining building construction permit and registering property, and the elimination of unnecessary bureaucratic red tape and cumbersome procedures which are sometimes linked to corruption. Third, a variety of governmental institutions at different levels of administration will be needed to support the legal and regulatory framework in general and specific contexts.

In the case of the SAPZ model, and agro-industrialisation and agribusiness in general, the institutional arrangement for the involvement of government in regulation and monitoring would revolve around an established Ministry/Department of Agriculture. This could serve as the central body for the coordination of an assortment of relevant policies that cover other domains of government and public administration, such as industry, trade, finance and public utilities. It is important that agriculture ministries/departments recognise the role of other state and non-state actors and the wide range of stakeholders that are concerned with developing and managing agro-industrial SEZs and understand the importance of coordination. Effective coordination will be required for avoiding gridlock and unnecessary delay in the planning and programming of SAPZ projects. This might require a shift in mindset in favour of cooperation rather than competition. The agriculture ministry could also play an important role in organising or ensuring the provision of necessary upstream and downstream services that are relevant to the operation of SAPZs.

Given the importance of industrial policy for the planning and operation of SEZ projects, the institutional framework for the SAPZ model should cover procedures to enhance the role of the model as an instrument of industrial development. SAPZs can become a key component of industrialisation strategies in SSA. Furthermore, SAPZs can provide a basis for the formation of industrial agglomerations in strategic locations that attract investment flows, promote economic linkages with the rest of the economy, and influence patterns of urbanisation and labour market supply preferences. Although the formulation and practice of industrial policy is complex, SAPZs provide an opportunity to develop and implement country-specific spatial versions that enjoy the patronage of and championing by the political leadership at the highest level and commitment by policy-makers to agro-industrialisation as a priority development strategy. Enhanced institutional coordination supported by strong leadership and ownership of the process are essential requirements of the regulatory framework for successful SAPZ projects.

4

Case Studies: Insights, Synthesis and Lessons

4.1 Case Studies: Lessons from Experiences

This chapter comprises of eight synthesized case studies of different SAPZ-type models in Africa. It presents and evaluates the performance of each model, including examination of underlying economic conditions, political process, policy space, institutional arrangement and the role of key actors, in relation to its contribution to transformation of the agricultural sector and broader national development. Lessons are drawn from the analysis of experiences from the different case studies from the standpoints of a range of strategic and operational factors, such as governance, enabling policy environment, location and spatial dimension, private sector participation, legal and regulatory institutional framework, financing method, management, national and regional market prospect, and integration into the global economy.

Deconstructing the findings from the case studies, as well as inputting knowledge of comparable examples from similar zonal economic development programmes in Asia (e.g. Malaysia, Sri Lanka, Vietnam), Latin America (Costa Rica, Dominican Republic and Colombia), and the Middle East and North Africa (Tunisia, Jordan and Bahrain), provide evidence for making policy recommendations and reaching conclusions concerning 'success factors' and 'pitfalls to avoid' in the planning and implementation of the SAPZ model in Africa.

4.2 The Case Studies

4.2.1 Case Study 1: Ethiopia - The Contributions of Integrated Agro-Industrial Parks to Ethiopia's Structural Transformation

Policy Context and Activity:

The transformation of the agriculture sector in Ethiopia has built upon early political commitments of the state to put 'agriculture first' and at the centre of the development agenda. The Agricultural Development-Led Industrialisation (ADLI) policy launched in the 1990s was the basis for successive five-year development plans. Its main objectives: to enhance agricultural productivity through better access to inputs, extension services, and road connectivity have been aimed at promoting cross-sectoral growth in agriculture to serve as the basis for industrial expansion. Most recently, Ethiopia's 'Growth and Transformation Plan II (GTP-II) 2015-2020 has sought to generate industrial sector growth capable of transforming the contributions of the agriculture sector to the wider economy. The rationale behind this post-2010 manufacturing-driven structural transformation agenda: to generate productive agricultural linkages with the emerging industrial sector and build technological capabilities— has helped to challenge the 'premature deindustrialisation' diagnosis attributed more broadly to industrial latecomers in sub-Saharan Africa.

Since a large share of Ethiopia's population is rural (80 per cent) and is projected to remain so until 2050, agriculture-related economic activities will continue to be the basis of livelihoods provision for the majority of the population (WDI, 2017; OECD, 2020). Since 1992, government has invested high expenditures in the agriculture sector; public investments in agriculture and rural development increased from ETB 239 billion to ETB 386 billion (2010-2015) and most recently, under GTP II, 21 percent of the national budget was linked to agriculture, against an African average of 4 per cent (Dorosh et al., 2018:2; Lopes, 2019:878). The industrial policy strategy of GTP II also emphasises the need to develop manufacturing industries that facilitate linkages to the agricultural sector. It accounts for agro-industrial activities and 'industries without smokestacks' in the horticulture, agro-processing and cut-flower sectors.[16]

Performance across agro-industrial subsectors— including horticulture, floriculture and leather-processing industries— has varied markedly in recent years (Oqubay, 2015). The share of the agro-processing industry in Ethiopia's GDP has remained low and behind target, and export diversification and competitiveness of processed food from agro-industrial activities still needs improvement (UNCTAD, 2016). In light of these challenges, the integrated agro-industrial park (IAIPs) model has been implemented by GoE to address the negative trade balance for processed

16 See Gebreeyesus (2017) on the implications of 'industries without smokestacks' on Ethiopia's industrialisation.

agricultural products and promote value addition through a diversified export basket. The model is set to facilitate productive linkages between agriculture and industry; stimulate employment for the growing rural workforce; balance rural-urban migration through new growth poles and meet domestic consumer demands for food through import-substituting activities.

Actors - Role of the State as Enabler: The Institutional Environment

The Ethiopian state has taken an active role to attract investment and public-private partnerships for the IAIPs. Thanks to a state-led industrialisation push, key champions in Ethiopia's industrial policy architecture have recognised the labour-intensive opportunities of agro-industry compared to the manufacturing industry located in export-processing zones (Oqubay, 2019). Strong and long-term government commitment from top leadership levels was sought after to ensure policy continuity of the IAIPs. The Ethiopian Prime Minister's office assumed the overseeing role and a high-level taskforce made up of key government agencies was established to meet every three months and solely deliberate on the IAIPs under the close supervision of the Advisor for Macro-Economic Affairs at the Prime Minister Office (UNIDO, 2020). Inter-agency coordination was established through the IAIP programme steering committee composed of senior officials from the Ministry of Industry, the Ministry of Agriculture, the Ministry of Finance and Economic Cooperation, the Bureaus of Industry from each region, the Agricultural Transformation Agency (ATA) and private sector representatives.

Institutional learning has been widely accredited to the GoE's industrial policy experience (Oqubay, 2015; Lin, Xu and Hager, 2019; Chang and Hauge, 2019). While the coordination among state agencies has been far from flawless, a strong political commitment to a structural transformation agenda driven by integrated agro-industrial activities has required stakeholder mapping by the various agencies to include cooperatives, unions, TVET and agri-research institutions and provide them with the support services. State agencies such as the Ethiopian Investment Commission and Industrial Parks Development Corporation have come to embody vehicles for 'policy learning by doing' and key leadership champions have provided the critical political clout to implement this agenda (Cramer, Oqubay and Sender, 2020; Sutton, 2019).

In terms of financing, the GoE's primary role has been to promote the IAIP model through key infrastructure provision and fiscal incentives to attract private sector investors who will run the operations within the park. Regional Industrial Parks Development Corporations are present in the four locations of the IAIPs to oversee this enabling environment for foreign and domestic investors. The Prime Minister's office also made the intensive effort to allocate funds for infrastructure development of the IAIPs including roads, utilities such as electricity[17], water, sanitation and waste water treatments, fencing and the development of Rural Transformation Centres (AfDB, 2018; UNIDO, 2020). This SAPZ model – initially supported by multi-stakeholder financing and parallel funding through loans and grants— has the ultimate aim of attracting private firms as long-term tenants to sustain the model.

Actors - Private Sector Engagement

Due to growing demand of the domestic urban market and of the global market for specialised exports of agro-processed and high value commodities, the state has invested in attracting private sector actors to help shift the country into higher-productivity agricultural activities. Most Ethiopian firms lack the technology, capital, and knowhow to be internationally competitive and the government has therefore committed to attract FDI through IAIPs that are developed, managed and operated under investment-driven partnerships with the private sector. Ethiopia continues to import processed foodstuffs on a large-scale, signalling opportunities for domestic entrepreneurs to expand agri-food processing as part of this private sector investment.

As of 2019, approximately 150 investors registered with the Regional Industrial Park Development Corporations (RIPDCs) in the four regions and five started constructing premises within two of the parks (SNNPR and Amhara) (UNIDO, 2019). The IAIPs have been spatially designed to ease logistics hurdles and other constraints though investments in physical infrastructure and one-stop-shop support services. This clustering of essential utilities and infrastructural connectivity to international markets allows for economies of scale that lower transaction and overhead costs.

GoE has provided incentives ranging from low-priced land parcels and leases for industrial park and manufacturing enterprises to fiscal measures of income tax exemption for 15 years if the business is developed outside of Addis Ababa in the four regional IAIP zones (UNIDO, 2018). Business enterprises that suffer losses during the income tax exemption period can even carry forward losses following the expiration of this period and investors granted with customs duty exemption are allowed to import capital goods duty

17 A USD 2 billion financing agreement between the GoE and China has financed the electrification of the parks has been provided.

free indefinitely if the investment is in the manufacturing and agriculture sectors (UNIDO, 2018).

Drivers - Regulatory Environment

In light of all these incentives, a stronger regulatory framework is needed to provide protection and certainty to investors but also to ensure that benefits afforded to investors contribute to high-quality productive outcomes for the Ethiopian economy.[18] Foreign investors in Ethiopia enjoy protection under external standards: most favoured nation treatment, procedural guarantees to access domestic courts, non-expropriation and adequate compensation if expropriation occurs.

But gaps have been identified in the legal institutional mechanisms of enforcement, in particular complaints handling and dispute settlement. In addition, the multiple investment treaties in place to complement the domestic legal regime has adversely affected the harmonisation of rules (Kidane, 2019). The main constraint is that jurisprudential harmonisation is a very slow and unpredictable process and that many treaties appear outdated. The commercial code adopted in 1952 was only revised and updated by the council of ministers in 2020; this was in response to the growing calls to improve the ease of doing business and in light of developments in the home-grown economy and technology.

The key to the profitability of incentives is tying them to productive performance: high quality exports, provision of labour-intensive industry that creates employment and decent working conditions, and technology learning between foreign and local firms based in the IAIPs. Despite attracting private sector investment and targeting FDI to bolster joint-venture industrial enterprises, there have been reservations surrounding the productive nature of investments; the key architect behind Ethiopia's industrial policy strategy accepted that the existing political economy 'has favoured speculative activities rather than productive investments in export-orientated manufacturing' (Oqubay, 2019: 622). Building upon these policy pitfalls, the GoE must regulate the productivity of the IAIPs investments, to measure their effectiveness in stimulating agricultural productivity growth capable of both reducing poverty at the national level and transforming the productive base of domestic economy to achieve structural change.

A regulatory framework is an integral part of an integrated and well-functioning industrial policy of any aspiring industrialiser.[19] It must include output targets – rate of growth of high quality exports and labour market targets—the provision of decent working conditions, facilities and improved wages capable of withstanding the price inflation of basic wage goods (Cramer et al, 2014:129). Regulation should also extend to the degree of technology diffusion achieved through joint ventures between foreign and domestic firms. Technology diffusion has informed the ambitions of the national industrial strategy but the limitations of value capture by local Ethiopian firms has been apparent.

The IAIPs must also be linked to more long-term savings mobilisation beyond the fiscal incentive periods offered to investors. If Ethiopia's investment push evaporates without generating sufficient incomes, profits, and savings, then the government has to adopt policies which simultaneously ensure that investments are productive and that they result in rising real wages, as a source of savings as well as a source of demand (Cramer, Oqubay and Sender, 2020). These 'reciprocal control mechanisms' typically distinguish countries that have succeeded with state-led development strategies from those which have offered similar incentive packages but have failed to sustain the momentum of structural change (Amsden, 2001).

Performance Evaluation

Integrated Agro-Industrial Parks

The GoE has established four integrated agro-industrial parks with shared infrastructure in identified regions: Amhara, Oromia, SNNP and Tigray. The IAIPs specifically target the expansion of inclusive broad-based economic opportunities through Ethiopia's structural change from an agricultural-based economy to a more industrial economy. The technical cooperation and co-financing package worth approximately USD 1.2 billion[20] is coordinated by the GoE, AfDB, EU, UNIDO, Korean Exim Bank, Germany and Italian Cooperation and focuses on: (i) infrastructure development; (ii) Supply chain development; (iii) Access to finance; and (iv) Institutional capacity-building.

The extensive feasibility planning and spatially inclusive strategy behind the four parks offer lessons on combined success factors and pitfalls to avoid in

18 See Kidane (2019) on the legal framework for the protection of FDI in Ethiopia and laws pertaining to industrial parks and SEZs.

19 Industrial policy should not be aimed solely at promoting the process of industrialisation. Based on a confluence of political economy factors, industrial policy informs the sectoral composition of the economy and the allocation of resources. It is made up of constituent policies on private sector, regulation, tax and expenditure, among other corporate governance, anti-trust and competition policies.

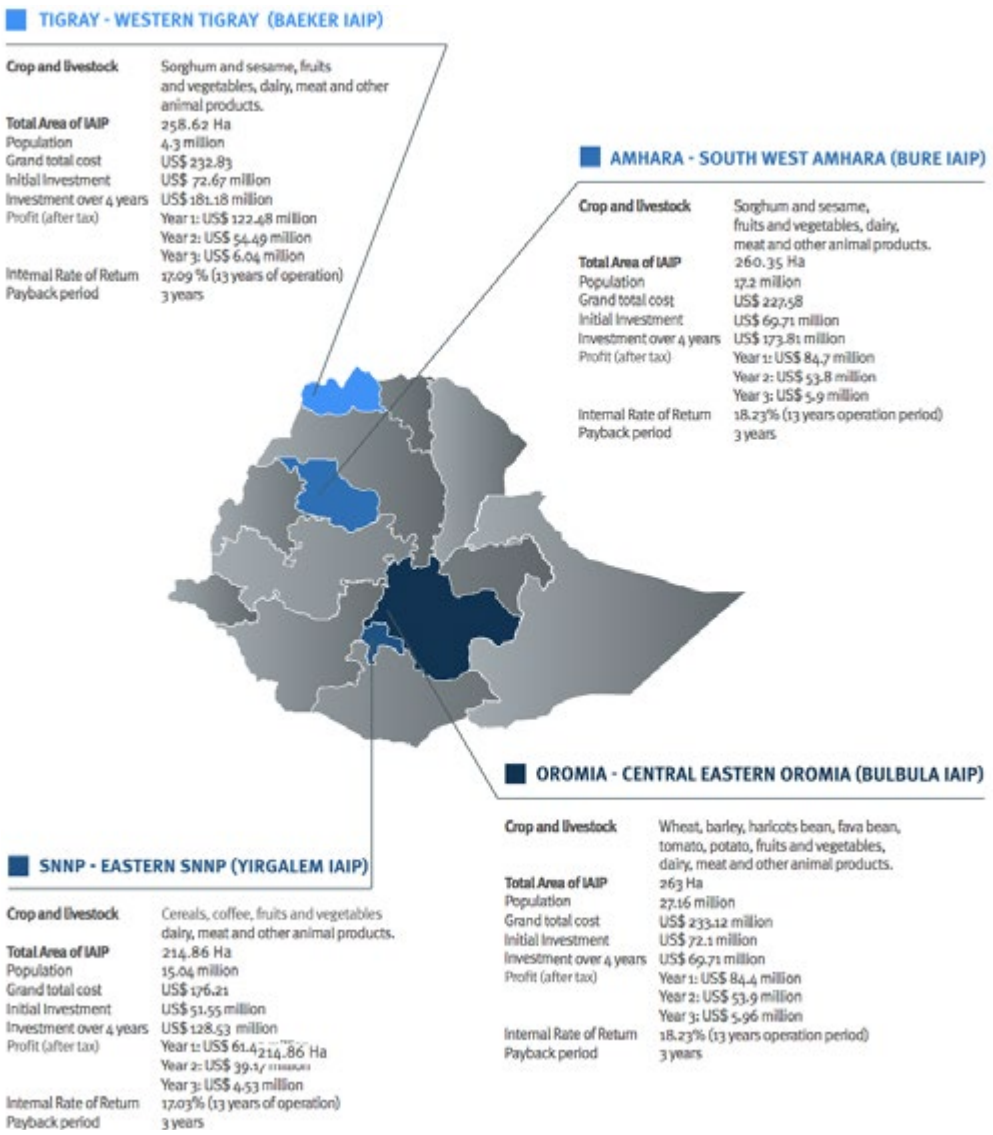
20 USD 604 million committed by the GoE and approximately USD 644 million leveraged from development partners this includes USD 100 million from the AfDB (UNIDO, 2019).

the early stages of development. These range from the strong facilitating role of the Ethiopian state; rural-urban linkages along the value chain; attracting private sector engagement for employment promotion and creating regulatory frameworks to protect and measure the success of investments.

The Baeker (Tigray), Bure (Amhara), Bulbula (Oromia) and Yirgalem (SNNP) IAIPs are connected with 28 rural transformation centers and positioned within 17 larger agro-industrial growth corridors (see figure). Despite extensive spatial planning undertaken to consider the agri-food chains present at the Woreda level[21], the GoE decided to over-ride the study recommendations and set up a park in four chosen regions irrespective of estimated viability, to ensure politically correct equal distribution among geographic areas and communities (FAO, 2017:154).

Each park is served by a network of rural transformation centres established by the GoE to provide linkages to producers and serve as raw material aggregation points in wider catchment areas (100 km radius) (UNIDO, 2019). Aggregation centres connect with surrounding rural farming communities, link crop and livestock production to storage and processing facilities and strengthen domestic agro-industrial value chains. In this sense, the IAIP acts as a vehicle to transform the agricultural value chain, from primary production through the various stages of processing and delivery, to wholesale and consumer markets, locally, regionally and globally.

Figure 3: Mapping Integrated Agro-Industrial Parks



Source: UNIDO (2018)

21 The Woreda is Ethiopia's lowest administrative unit.

High-potential value chains were identified for the IAIPs based on regional specialisations and include wheat, barley, maize, sorghum, sesame, fruits and vegetables, beans, potato, dairy and livestock. These were targeted for both export-orientated and import-substitution trade opportunities. FAO completed value chain studies of five agricultural commodities (wheat, potato, meat, dairy and tomato) prioritised for investment in South-Eastern Oromia Agro-industrial Corridor where the Bulbula IAIP site is located (Brasesco et al., 2019). Dairy processing was especially targeted in the Bulbula and Bure IAIPs and complemented with Rural Transformation Centres (RTCs) which facilitate primary dairy collection to help promote an import-substitution industrialisation (ISI) function of the IAIPs. The milk processing sub-sector has been promoted for value chain expansion within the IAIPs to help reduce this large import bill (FAO, 2019).

In addition, the GoE outlined its goal of domestic wheat self-sufficiency by 2022 to reduce the $700 million spent annually on grain imports. The rationale behind this promotion of staple food value chains such as milk and wheat is rooted in a broader import-substitution industrialisation strategy aimed at supplying food to meet the domestic demands for some goods that workers are simultaneously producing in the IAIPs. A key constraint on financing a dynamic agro-industrial SAPZ package— of investment, productivity growth, employment and savings— is one connected to price inflation of basic goods. Price shocks on basic goods in rural areas can lead to a political reaction, frightening existing and potential investors (Kalecki, 1976; Cramer, Oqubay and Sender, 2020). Food security and affordability must be further targeted at the wider Ethiopian population and the rural communities, who are among the net food purchasers and those employed and residing in the catchment areas of the IAIPs and RTCs.

Rural-Urban Linkages and Balanced Urbanisation

The sectoral policies behind the IAIPs have a spatial focus on fostering rural transformation centres and intermediary cities across parts of Ethiopia. These growth poles help to distribute rural migration away from the over-populated capital city, Addis Ababa, and attract young Ethiopians in search of employment. SAPZ can facilitate rural-urban transformation in three major areas: (1) creating reciprocal linkages between the farm and non-farm sector (2) crucial market access in the form of post-gate farming services to support value chains identified and (3) employment provision that accounts for within-rural labour migration. However, GoE has faced some binding constraints at different administrative levels. These include inconsistent policy knowledge on the agglomeration effects of these spatial zones; outdated 'rural' 'urban' typologies which fail to account for changing rural realities and the multidimensional needs of labour migrants straddling different activities in the agriculture sector to secure wages (OECD, 2020).

The vast majority of Ethiopian farmers are not well integrated in commercial agri-value chains and this is one of the reasons for the shortage of raw material inputs. Low access to finance, weaknesses in out grower and farm supply contracts and the proliferation of intermediaries also constrain the prospects of better returns to Ethiopian farmers (UNIDO, 2019). Using capacity utilisation as an indicator to measure the performance of these agro-industries will be important for each of the targeted value chains since better performance is tied to regular supply of raw materials (Tezera and Lingohr-Wolf, 2012). Production at the farm level needs to be improved to gain the net marketable surplus that is required for the consistent supply of agricultural raw materials to the agro industrial zones. Locational Advantage is particularly important to satisfy this.

At the upstream level, this requires some focused infrastructure and activities such as the Rural Transformation Centres (RTCs), Aggregation Centres, Irrigation facilities, improved seeds and agricultural inputs and capacity to improve farmer agronomic practices. The RTCs form the main point of contact with commercial agricultural value chains and also offer small-scale financial services to farmers as well as basic social services. There is an explicit interface between the IAIPs with the leaders and technical staff of the cooperative unions and farmer groups to institutionalise a demand driven value chain program targeted at enabling farmers.

This model is complemented by contract farming arrangements where agricultural producers enter into legally binding agreements with processors that cover production methods and technology, output quantity, quality and prices and technical and financial support to reduce transaction costs for both parties (UNIDO, 2019). Marketing mechanisms such as contract farming, have been used in the past, but their overall use in Ethiopia is still very limited and requires development to improve on the vertical integration of farmers into value chains. The aim to connect IAIPS with the local economy through forward and backward linkages is evident. But the main challenges of successfully integrating farmers into new or pre-existing value chains will be inevitably tied to linking this production output to new international and regional export markets— not only to domestic demands.

For this, the IAIPs require a strong research and development arm for collection and distribution of market information and complimentary support from national testing and certification facilities. The Quality

and Standards Authority for Ethiopia (QSAE) exists to perform this function but needs to strengthen its collection and dissemination of the sanitary and phytosanitary requirements for different agricultural products and markets. The QSAE needs further capacity to reliably establish standards, coordinate implementation in each product sector, and monitor compliance on food safety — important if exports from the IAIPs are to comply with international quality standards.

Human Capital Upgrading: Employment, Skills and Training

To stimulate broad-based development beyond the spatial parameters of the zone, each IAIP is served by a network of RTCs which disperse employment and skills upgrading along the entire agri-value chain and across wider catchment areas. Creating productive and remunerative employment opportunities and on-the-job learning with long-term consequences for growth and standards of living is important. GoE has acknowledged this, and the important contribution of labour to economic development for a national strategy of accumulation in its late industrialisation. Jobs in high-skilled commercial agro-processing can offer higher wages than agriculture or the informal sector. Using its comparative advantage in low labour costs the GoE targeted labour-intensive industry capable of scaling returns and employment multipliers for 66 per cent of its population currently engaged in agricultural activities (WDI, 2019).

A Look Inside the Yirgalem IAIP: The Sunvado Avocado Oil Factory

The Sunvado factory, owned by the Dutch company 'Trading Organic' was established in 2018 as a processing facility for premium organic avocado oil inside the Yirgalem integrated agro-industrial park. Its vision: to promote local Ethiopian avocado farmers access to export markets. With most avocados in the southern region typically sold at low prices to the local market, the Sunvado organic avocado oil processing facility offered farmers a better price for their produce, while offering premium organic avocado oil to export markets. Working together with the avocado farmer cooperatives, it employed field extension workers to support the supply chain of avocados for processing and established an organic monitoring system which helped to secure organic certification in 2019.

A state-of-the-art avocado processing line was installed, and the factory began operations in 2018 exporting organic avocado oil to Japan, Holland, and North America. The quality team at Sunvado works together with the global quality assurance department of 'Trading Organic' to operate within a quality management systems framework and uphold food safety certifications including: EU-Organic, USDA-NOP, JAS and FSSC22000. In 2020, the factory secured over one million USD through exports, 350 permanent and temporary jobs and benefited more than 73,000 farmers through market linkages within the surrounding community.

Ethiopia's predominant agricultural workforce has faced challenges in adapting to the discipline of knowledge-intensive high-value agro-industrial work, and not all have been equipped with the necessary soft employability skills to navigate horticulture and agro-processing subsectors despite substantive Technical and Vocational Education and Training (TVET) investment. Working conditions have contributed to high labour turnover in industrial parks, and despite the absence of labour unions, the business-state alliance at the heart of this model has not been able to keep up the momentum of building an industrial workforce.

Linkages between the IAIPs and post-farm gate sectors are helping to generate increased demands for services and in turn new rural employment opportunities. To help build an agro-industrial workforce, skills upgrading has been targeted through TVET programmes in specialised areas of each IAIP: fruits and vegetable processing; dairy processing; meat processing; honey and beeswax processing; edible oil processing technology; animal feed processing; and poultry product processing.[22] Some of this upskilling is directly linked to the production of staple food goods which can serve as sources for import-substituting industries and local consumption. TVET in Ethiopia has been promoted through state expenditures and active support of competence-based training. But collaboration between TVET and manufacturing industries across the country has been limited and

22 The AfDB and GIZ are among the actors involved in the PROSEAD initiative supporting the coordination of TVET and labour market-based curriculum in agro-processing for the IAIPs.

the unemployment rate for TVET graduates is high. Few youths from rural, low-income backgrounds graduate and rarely do urban TVET graduates wish to work on a factory floor (Cramer, Oqubay and Sender, 2020). If the IAIPs are projected to account for 85% of total agro-industrial jobs by 2025 (AfDB, 2018) and that workforce is required to be skilled, then greater emphasis is needed on closing quality skills shortages in competences in production processes; use of modern machineries and maintenance.

Lessons Learnt

Ethiopia's four IAIPs are in the early stages of development and set to be in full operation by 2025. To speculate their presumed long-term success and forecast projections would be premature until further substantive monitoring and evaluation and implementation updates are conducted. What can be taken away, is the policy learning experiences and institutional coordination that was involved in strategizing this SAPZ-type model for the Ethiopian political economy. The state has performed an active role in implementing an agro-industrial agenda and aligning the IAIPs with national development strategies to promote value-addition activities for long-term structural change—that is, to stimulate agricultural productivity capable of contributing to the country's industrial transformation.

To be sustainable, the IAIPs will have to be profitable, competitive and linked to market demand (domestic, regional and global). But beyond this, they should be fundamentally beneficial to local populations. When successfully implemented, they can host a range of benefits for the Ethiopian rural economy, providing labour-intensive opportunities, agro-industrial value-addition and export diversification through a shared space for enterprise and innovation— each necessary to advance the national structural transformation process.

4.2.2 Case Study 2: Ethiopia - The Multiplier Effects of Ethiopia's Floriculture Industry

Policy Context and Activity

The floriculture sector is a nascent agro-industry in Ethiopia. Its prospects lie in its broad-based impact: agricultural value addition, export diversification, employment creation and economy-wide linkages. As the sixth largest floriculture exporter and the second major exporter from sub-Saharan Africa, Ethiopia accounted for 2.4 percent of global exports in 2017 (Whitfield et al., 2020:4). The industry represents diversification into a non-traditional export product and cut flowers are among the top five export commodities of Ethiopia, having generated close to $1billion in earnings since 2004 (Iizuka and Gebreeyesus, 2016; Oqubay, 2015:150-153).

Performance of this commercialised sector has been referred to as an encouraging example of 'self-discovery' and active government facilitation, and its productivity success owes itself to improvements in phytosanitary and cold-chain practices, upskilling of Ethiopian managerial labourers, and partial entry of local firms into this agro-industry (Oqubay, 2015). Cut flowers are perishable goods and require careful distribution activities articulated to just in time delivery. These activities tend to be spatially clustered around

production sites due to the lack of refrigeration facilities, logistics and transport services available to firms.

In Ethiopia, this clustering is taking place through intersectoral linkages and spatial coordination between agricultural, service and manufacturing activities in the wider economy— a sign that structural change is taking place through productive resource allocation between sectors. While activities in the floriculture sector have not operated through a spatial 'one stop shop' zone model, the organic clustering effect has helped generate shared demands for complimentary transport and logistics services and has distributed inputs for the cut flower value chain within rural growth poles and intermediary cities.

Actors: The Role of the Government and Private Sector

Collaboration between the government of Ethiopia (GoE) and the private sector has contributed to the growth of cut flower industry. When local floriculture firms began operating in the late 1990s, the state was unaware of the potential of this agro-industry. Five 'discovery' flower firms (local and foreign ventures) organized and formed the Ethiopian Horticulture Producers and Exporters Association (EHPEA). This private sector coalition discovered that flowers could be produced and exported profitably, following lessons from its neighbours in Kenya, and approached the GoE to engage support for the sector's development (Gebreeyesus, 2017).

EHPEA resembles a 'cluster initiative'— identifying the binding constraints to horticulture competitiveness and serving as a catalyst for coordination between projects (ITD, 2009). This 'agro-cluster' helps bring together producers, agribusinesses and institutions engaged in the agro-industrial subsector to address common challenges faced by horticulture firms. In the early phases of the sector's development, the state coordinated multifaceted support focused on access to land, long-term credit, infrastructure, and air transportation.

The Prime Minister of the day, Meles Zenawi coordinated with EHPEA representatives to participate in the preparation of the first five-year action plan for the floriculture sector and outline business constraints and solutions to address emerging bottlenecks. The EHPEA acted as an institutional catalyst for policy reform and in response to mounting pressures for standards compliance it initiated the national scheme of good agricultural practice (GAP) known as EHPEA Code of Practice for Sustainable Flower Production— closely aligned with international standards.

Drivers - Institutional Environment

Industrial policy has played an incentivising role. Subsidised financing for both foreign and local firms were arranged through the Development Bank of Ethiopia (DBE) and investment incentives were made available: land leases at $10 per square meter compared to $30 in neighbouring Kenya and air terminals with reliable freight-capable planes through the national carrier, Ethiopian Airlines to keep up with demands for just in time perishable exports (Oqubay, 2015). To help further stimulate FDI, the government introduced non-fiscal incentives: custom duty exemptions, loss carry forward, remittance of funds and allowing full profit repatriation (Melese & Helmsing, 2010:46, 63).

However, the relationship between the government and the private sector has not always been smooth. Due to mismanagement, some firms were not able to run profitably, putting the DBE under pressure to foreclose or reschedule loans. The underreporting of export sales and the repatriation of foreign exchange reserves from flower exports was also a source of tension. In the absence of clearly defined reciprocal control mechanisms[23] in the contents of its industrial policy, success stories across local, foreign and joint-venture cut-flower firms have been asymmetrical; local firms have been less successful in facilitating technological learning and upgrading into more complex production capabilities such as breeding new varieties of flowers (Whitfield et al., 2020:15). In addition, the five-year profit tax holiday granted to investors has not been regulated closely and some firms have requested extensions (Gebreeyesus, 2017).

Performance Evaluation

Ziway: The Rising Agro-Industrial Hub

Ziway, located in the Oromia region of Ethiopia, has grown dramatically into an agro-industrial growth pole for large-scale floricultural and wine-producing firms since 2001. This region hosts the majority of flower farms where rose stems are snipped, packed and maintained in precise temperature and humidity conditions and transported (within the day) to export markets (Cramer, Oqubay and Sender, 2020). Within-

23 Reciprocal control mechanisms are conditions attached to state support (subsidies and incentives) which ensure that firms that receive such support 'reciprocate' through appropriate investment behaviour and performance (Amsden, 2001).

rural migration and employment diversification is a reality in contemporary Ethiopia; workers migrate in search of employment opportunities with higher returns and straddle across economic activities and seasons for job availability. Large-scale agribusiness investments have contributed to a new group of on-farm wage employees, who stimulate an array of non-farm employment—making these attractive sites for approximately 80% of the population who typically reside in rural areas. This has propelled 'hotspots for rural migration' like Ziway to indirectly contribute to a poverty reducing dynamic among the growing local population made up of seasonal migrant wage workers. These range from: policy reforms for public infrastructure, goods and services in the area and land converted to provide rental accommodation for migrant wage workers (Cramer, Oqubay and Sender, 2020).

Ethiopia's development strategy designed to raise investment levels and promote structural change in the economy has tried to account for the scope for productivity increases and employment growth within rural areas in the farm and off-farm economy. GoE is supporting economy-wide linkages required to maintain a fresh-goods supply chain for high-quality standards of global markets through investment, infrastructure and trade facilitation. The 'industrialisation of freshness' has required research and development in cool-chain infrastructure to transport flowers from farm to air to marketplace (Cramer, Di John and Sender, 2018). Having a well-run, state-owned airline has allowed the GoE to promote the expansion of the country's floriculture sector and based on favourable agro-climatic conditions and relative proximity to major European markets, it incentivises improvements in freight handling airport cold storage.

The market and transport conditions, i.e. a strong international auction market for the flower industry and state facilitated freight capacity, help to explain the comparative success of the flower subsector compared to fruits and vegetable horticulture in Ethiopia. Fresh fruit and vegetable exports often require a direct sales market and more demanding phytosanitary standards depending on the country of import whereas flower exports are directed to auction markets in Europe with easier minimum requirements to sell products. The costs of transport vary between flowers-high value to volume exports-making air transport economically efficient, and fruit and vegetables-low value to volume bulky goods-that are more expensive to transport in fresh form and rely on lengthier cargo transport via Djibouti ports (Gebreeyesus, 2017:18).

The scope of flower farming activities has extended beyond the agriculture sector itself to generate demand for trade facilitation and transport services-a key feature of structural transformation (Benefica and Thurlow, 2017:9). However, floriculture buyers (being international) tend to nominate global input suppliers, including transport and logistics; this requires flower firms to develop transnational relations and capabilities to manage export processes in line with stringent conditions of buyers (Melese, 2017). This institutional coordination proves challenging for the already low number of local Ethiopian flower firms—trying to compete with foreign firms dominating the industry—and asymmetrically positioned in networks to navigate the informal institutions associated with European flower marketplaces, both in terms of auction and direct sales channels. These dynamics speak more broadly to the structural issues surrounding local and foreign ownership in the cut flower industry and the impact of this on capabilities, learning and technological acquisition in agro-industries.

Technology Diffusion and Local Value Capture

In the early stages of export industry development, resources tend to be shaped by shared networks between local and foreign supplier firms, regional proximity to existing supplier countries, interests of global buyers and government industrial policy (Whitfield et al., 2020:1). The Ethiopian floriculture sector has been principally shaped by foreign direct investment: In 2016, out of a total of 82 flower firms, 15 had full local ownership (Melese, 2017). A tripartite relationship between the government, industry players and Dutch horticulture institutions has especially contributed to the industry's rapid growth and the primary destination of flower exports to the European Union. But there have been constraints in linking these investments to the domestic knowledge economy and technological capabilities upgrading— as in technical, organizational, and managerial skills required by firms in order to achieve productivity levels that established firms have achieved to set the market standard (Lall, 1996).

Under what terms and conditions Ethiopian flowers are integrated into global value chains (GVCs) is important— this impacts the amount of value that domestic firms can capture. The 'first movers' in Ethiopia were in fact local firms; two domestic entrepreneurs took on the risks of the initial discovery process (and later failed) in the late 1990s due to challenges in logistics, land, and finance. Paving the way for a foreign owned UK-based flower business that started its production only after thoroughly examining the performance of the two early entrants (Gebreeyesus, 2017).

FDI has played an important role in knowledge transfer and diffusion mainly through training and turnover of skilled workers. But when it comes to value-addition and technological progress— that is typically achieved through function and capabilities upgrading, local

firms are faced with challenges. Ethiopian-owned floriculture firms tend to export flowers produced in the lower technological entry point of grow, cut, and pack activities. There has been limited upgrading into flower design and bouquet and breeding new varieties for buyers that need more complex value-addition functions (Whitfield et al., 2020:9). Due to price pressures on suppliers and demanding requirements of buyers, local owned flower firms tend to build specific capabilities in GVCs linked to export strategies— leading to uneven capability upgrading, limited local value capture and constrained space for social upgrading of employment standards (Whitfield et al., 2020). While local flower firms have overcome a range of marketing challenges in order to enter export markets, such as the improvement of quality and handling methods and fluctuation of auction prices, there has been limited spill overs in technology diffusion and upgrading which has stunted local firm capabilities.

Employment and Opportunities for Learning

The floriculture sector has played an important role in creating employment for more than 100,000 jobs (direct and indirect)— still a small offering for the Ethiopian population which stands at more than 118 million (Iizuka and Gebreeyesus, 2016). But in 2012, the total number of workers employed by agribusiness in floriculture was larger than total employment in the manufacture of textiles or in the basic metal and engineering industries (UNIDO, 2012). It has been a source of knowledge transfer and diffusion through training, upskilling and turnover of workers. These workers have a fundamentally important role in the development of knowledge assets because they are the key players in the process of learning how to use new technologies in flower production.

Labour turnover in Ethiopian flower firms is high and represents more broadly the recent challenging experiences of African employers trying to foster a workforce capable of internalizing the rhythms and requirements of industrial capitalism (Oya, 2019). The increasing cost of wage goods (food, transport, rent and kerosene among others) in rural areas has been one of the main reasons why flower firms have found it difficult to retain workers. Employers face recurring training costs and labour productivity remains low compared to levels achieved on farms in other countries (Melese, 2015; Hardy and Hauge, 2019). This leads to a double dilemma: if firms have to raise wages then their profit rate may be hit, negatively affecting the investment and if firms prioritise profits and lower wages, they may face insufficient domestic demand for the goods they produce, and wage workers will find it difficult to sustain their rate of saving (Cramer, Oqubay and Sender, 2020).

Disciplining workers— lowering wages and maintaining labour market flexibility has been a common strategy touted by foreign firms. But this wage depression has not stimulated rising productivity. In Ziway, due to the global demand for roses and workers to harvest them, rent and inflation have risen. A living wage has been calculated at USD 148 per month for this town, yet workers are paid with wages ranging from USD 25 to USD 50 per month— below the World Poverty Line of 1.90 US dollar per day (HiVOS, 2019). In addition, worker contracts are precarious, compromising job security and workplace benefits and together these conditions are contributing to high labour turnover.

The growth of the sector has also acted as a catalyst for labour union mobilisation. Under the flower farms umbrella union body, leaders of farmer unions in Ethiopia have been trained in collective bargaining techniques and understanding the Labour Proclamation—this was adopted due to growing pressures from the National Federation of Farm, Plantation, Fishery and Agro Industry Trade Unions (NFFPFATU). In 2019, the Ethiopian parliament approved this draft Labour Proclamation which introduced regulations on workplace sexual harassment and sexual violence— crucial for the horticulture sector made up of predominantly women employees and where sexual harassment is known to operate without disciplinary action.

Lessons Learnt

The important lesson to take away from Ethiopia's cut flower clusters, is not one of "picking" flowers as the "winning" industry. Rather, it is one of policy 'learning by doing' undertaken by the GoE: engaging the EHPEA private sector coalition; mobilising the resources of Ethiopian Airlines and improving the institutional support for this sector. The Ethiopian state is showing that states can acquire capabilities in agro-industries through policy learning by doing, even if this involves some learning by failing in certain areas (Oqubay, 2015).

Positive employment-creation generated by the floriculture sector needs to be considered against negative spill overs-high labour turnover, limited technological upgrading and crowding out of local firms. Further efforts are needed to target the technological upgrading of local firms into more value-added functions and capabilities in cut-flower production and marketing. Policymakers need to recognise that emergent wage workers in agro-industry are central to the process of technical change and economic transformation – it is workers that adapt the blueprints of new technologies to actual production and in time transfer this 'learning by doing' to the domestic knowledge economy and local firms.

4.2.3 Case Study 3: Kenya - Agro-Cluster Upgrading and Horticultural Value Addition

Policy Context and Activity

In its "Kenya Vision 2030", the Kenyan Government set out to transform local agricultural production capacity, develop new products for international exports and expand its presence in regional markets. Taken together, Vision 2030 and the Kenya Industrial Transformation Programme aim to facilitate common services, infrastructure and grow export-orientated agro-industrial enterprises. 'Special Economic Clusters' have been piloted and range from agro-processing clusters in Eldoret to horticulture and fisheries processing in Kisumu, and to an SME park targeted at meat processing in Nakuru (Republic of Kenya, 2008: 77).

Agriculture remains an important sector of the Kenyan economy and the private sector comprised mainly of small and medium-sized farming and processing operations makes up a key part of this activity. Increased trade in high-value agricultural products and the modernisation of export supply chains has been shown to produce important positive effects for rural development and poverty reduction (Maertens, Minten and Swinnen, 2012). Horticulture is Kenya's second-biggest foreign exchange earner after tea, accounting for 21.4 per cent of the total value of its exports (Kenya National Bureau of Statistics, 2018). The country has become the region's largest exporter of fresh fruits, vegetables and cut flowers to Europe and the sector is a major source of foreign exchange, employment and poverty reduction (Tyce, 2020).

Actors: The Role of the State and Private Sector in Kenya's Horticulture Clusters

In Kenya, cluster development initiatives have been driven by the private sector and facilitated by the state. The Kenyan state – and the broader political economy context in which it is located – has played a more important role in the horticultural success story than has generally been acknowledged, helping to grow the sector while cooperating with the private-sector to overcome key constraints (Tyce, 2020:1). At one point, horticulture generally lacked salience in the eyes of ruling elites, given that it made neither large-scale contributions to foreign exchange nor employment compared to preferred cash-crops like tea and coffee. However, from as early as the 1960s, certain political elites, including the then Minister of Agriculture bought into private horticultural enterprises as silent partners and owners. These "champions" with vested interests gave the requisite state support: low-cost long-term leases, unlimited expatriate work permits and guarantees against changes to taxation and profit repatriation laws— this preferential treatment for the sector helped to attract subsequent investors (Tyce, 2020:2).

High-value food supply chains require private investment—domestic as well as foreign— and this depends on the state creating the right conditions to attract investment by ensuring macroeconomic stability. State-business relations have combined with an increase in FDI to drive constant growth in Kenya's horticultural exports since the 1970s. Achieving this sectoral growth has not depended 'on leaving the private sector alone'; the state has facilitated a favourable business climate and periodic interventions in research, logistics and quality assurance-remedying constraints around infrastructure, airfreight, market access and inputs (Whitaker & Kolavalli, 2006, 360).

As part of the government's current boost to private sector engagement, research and development (R&D) in technology policy and agro-industry has been encouraged through funding (FAO, 2017:325). The Kenya Industrial Research and Development Institute is one of the main agencies collaborating with sector associations, training centres, standards institutes and technology support bodies to help diffuse technology among the agro-industrial sector (Wohlmuth, Kormawa and Devlin, 2012). The Ministry of Industry, Trade and Cooperatives (MITC) has been the key actor engaging in bilateral cooperation with other countries to support technology transfer. It has also partnered with the Kenya Agri-Business and Agro-Industry Alliance, a private sector coalition dedicated to strengthening Kenyan agro-industrial competitiveness, and a key actor helping to lead the agro-processing component of the Kenya Industrial Transformation Strategy (Were, 2016:11-16).

The Horticultural Crops Development Authority (HCDA) has been coordinating, regulating and developing the sector since its creation in 1967. It unleashed its self-discovery process to provide an indirect and facilitative role in coordinating horticulture firms to form an independent exporters association that would directly liaise with the government to develop sophisticated export trade and joint marketing overseas to promote diversification (Tyce, 2020:6). The growing influence of its institutional capabilities was pivotal to securing investment in horticulture-specific infrastructure to support perishable products: collection centres, refrigerated trucks and cold stores at airports-predominantly targeted at smallholders reflecting the government's desire to integrate them into production.

Airfreight development has played a growing role in the competitiveness of high-value, time-sensitive cargo in

Kenyan fresh flower, fruit and vegetable value chains. Investments in logistics infrastructure for perishable exports through Kenya Airways and in quality and food safety assurance systems have been instrumental to Kenya's export diversification success, helping to attract private sector investment (Lisk, 2011:250). Most recently, President Uhuru Kenyatta has also overseen contributions to protecting the sector despite its decline in export value. The government has cooperated with horticultural associations to send a high-level delegation – comprising public and private actors, including the Trade Minister to Europe— to negotiate its EPA amidst delays that have brought trade-related gridlock in the East African Community[24] (Tyce, 2020:13; Krishnan, 2018).

Drivers: The Institutional and Regulatory Environment

The regulatory framework in Kenya has fluctuated across different periods, with earlier periods of limited fiscal flexibility contributing to impressive results in Kenya's horticultural exports and revenues captured from horticultural firms were deployed productively elsewhere (Tyce, 2020). Today, firms have become increasingly scrutinised by the Kenya Revenue Authority, responsible for collecting corporate tax from horticulture exporters. The KRA recently took on a number of high-profile large-scale farms for tax evasion and transfer pricing practices which thwarted domestic revenue mobilisation efforts (Mwangi, 2018; Tyce, 2020: 11). Value capture should form an increasingly important part of Kenya's regulation, this depends on strong corporate governance to support the repatriation of profits and boost local ownership in the sector (Mwangi, 2018).

Today, one of the biggest constraints facing horticultural cluster firms, is the duplication of taxation from county governments and the national government and these efforts have prompted firms to diversify operations to other countries, particularly Ethiopia which offers more fiscal incentives, cheaper land leases and labour (Mitullah et al., 2017). Cost-price ladders are a useful framework in these circumstances for cross-comparisons on inputs through farm production, transportation and distribution revealing the value added at each stage. When looking at competing clusters, it may be cheaper to grow flowers in Uganda than in Kenya but transportation costs may be higher— cost-price ladders help identify initiatives that can bring their costs in line with the competition (FAO, 2017:114).

Reliable institutional governance should include public–private cooperation that supports regulation and traceability systems and builds confidence among buyers in global markets. Strengthening these national standards help to stimulate value-addition in the process of export diversification. The newly revised 2019 Kenyan regulations on Horticultural Crops sets out to adopt national and international standards in order to ensure compliance in the handling, processing, transportation and harvesting of produce. It provides a framework for inter-agency collaboration in the horticultural crops industry, such as collaborative functions between Kenya Plant and Health Inspectorate Services and the Agricultural Food Authority (AFA) to strengthen and align regulatory frameworks.

The Horticultural Crops Directorate is working on a national food safety and traceability mechanism that enables the fresh fruit and vegetable sector to reduce the number of inceptions by the EU and improve domestic production. In addition, the Horticulture Competent Authority Structure (HCAS) provides the sector with a network that facilitates the implementation of such policy frameworks (Matui et al., 2016:9). Membership includes the Ministry of Agriculture, Kenya Plant Health Inspectorate Service (KEPHIS), Horticultural Crops Directorate (HCD), Kenya Agricultural and Livestock Research Organization (KALRO) and Pest Control Products Board (PCPB) and which is represented by the private sector through Fresh Produce Exporters Association Kenya (FPEAK) and the Kenya Flower Council (KFC)— however, the functions of the central and county mandates need to be further harmonised.

Another important objective of the revised Regulations on Horticultural Crops (2019) is concerned with bolstering quality data collection; the horticultural sector has been constrained by unreliable data collection which affects the policy decisions by Kenyan policy authorities. Under the new regulations, it is a legal requirement of firms to submit accurate quarterly returns to the AFA and accurate record keeping by operators. The National Horticulture Traceability System acts as the framework for tracing horticultural crops, this is an especially important digitalisation opportunity that can be further seized by the Kenyan government in the current COVID-19 economic recovery period to promote greater supply chain transparency and compliance with standards which can translate into better prices for sellers. This updated regulatory framework is encouraging in the context of Kenya's expanding export diversification, especially for fresh fruit and vegetables (FFV) into competitive markets with increasingly stringent standards.

24 Trade opportunities are an important factor when considering Kenya's agricultural export strategy. The current negotiations for the Kenya-US free trade area, along with its individual approach to the EPA's bypassing the EAC customs union, mark the growing precedence of Kenya's 'do it alone' trade strategy. This approach has been a challenge for the already delayed implementation of the African Continental Free Trade Area that Kenya was among the first to ratify.

Performance Evaluation

Agro-Industrial Clusters

Cluster initiatives in Kenya tend to centre around high-value and export-orientated horticulture activities and have been targeted at diverse sets of flowers, fruits and vegetables that share supporting infrastructure, cold chain facilities, input providers and transportation services. Much of Kenya's agricultural success is associated with non-formalised agglomeration activities that spread from Lake Naivasha, Mt. Kenya, and Nairobi, all the way to Eastern Kenya. These clusters are operated by individual firms which agglomerate in certain areas to benefit from economies of scale. They build on the interlinkages and networks of producers to create an enabling environment for interfirm cooperation and innovation and help account for important local externalities to generate enhanced market intelligence information and access to markets. Since horticultural activities often involve perishable products and special political sensitivities regarding food security, standards and pricing— a balanced series of policy considerations is needed to ensure competitiveness against social factors (FAO, 2017:91).

The upgrading of the cut-flower industry is one subsector which has been supported by this cluster effect. Lake Naivasha, the centre of the flower industry in Kenya, has benefited from the availability of fresh water resources; existence of large-scale farms; conducive soils and climates; proximity to the country's international airport in Nairobi; and international trade agreements (Bolo, 2006; Gálvez-Nogales, 2010:56). Infrastructure development has jointly been undertaken by the government and private sector, such as the establishment and maintenance of roads, pre-cooling facilities and cold storage and Naivasha has grown to become a magnet for agro-industrial labour with vast numbers of migrant workers working in the flower farms (Kuiper, 2019). The sector's growth is also attributed to skills development, technical competence and the benefits of FDI through links to foreign inputs and expertise.

Of the approximately 10,000 smallholder cut-flower farmers in Kenya, the vast majority operate as out-growers for export firms. These are networks of unorganized smallholder farmers who supply to export companies that market to the Dutch flower auction (Mwangi, 2018). Smallholders can enjoy a buffer zone and learning period by supplying to export firms who manage the complexities of temperature-sensitive supply and logistics, export handling and the politics of market access. In some cases, these export firms provide farmers with inputs and crop specific training as well as quality checks. However, the abilities of Kenyan smallholders to move beyond this supply production into value addition or direct trade remain limited; there is still the need to prioritise inclusive value addition.

The industry's growth also catalysed the emergence of related associations to resolve collective action problems; the Horticultural Ethical Business Initiative established in 2003 is one such example of growing demands for better working conditions and improved social accountability for the sector. This has also encouraged better compliance with codes of practice and certification of industry associations, such as the Kenya Flower Council, the Fresh Produce Exporters Association of Kenya, the Lake Naivasha Riparian Association and the Kenya Bureau of Standards (Bolo, 2006). Cluster production has been supported through related services and industries.

The entry of mobile phone providers in a wide variety of Kenyan agro-clusters has enabled farmers to benefit from price discovery and better-informed marketing choices. It has also been a key a source of agro-finance through mobile funds transfer; Kenya is widely commended for its innovation in mobile banking among its low-income rural communities and formerly "unbanked" farmers (FAO, 2017:95). Post-farm transportation and distribution has also benefited from cluster and agglomeration effects, becoming more efficient and competitive. The introduction of crop insurance for pastoralists is now enabling Kenyan herders to protect themselves against adverse weather, providing funding against future losses due to climate change (FAO, 2017:95)

Integration of Farmers into Fresh Fruit and Vegetable Value Chains

Value chain participation and upgrading in fresh fruit and vegetables industry has had a multi-dimensional impact on Kenyan farmers and producers. The government has recognised cluster promotion as a valuable tool to support agricultural enterprises in their territory and help them link to global agricultural value chains more efficiently and sustainably. Over 8 million small-holder farmers produce horticulture crops (Republic of Kenya, 2019) and agro-clusters can help boost small-scale farmers and agribusiness to engage in higher productivity, market-orientated and value-added production (FAO, 2010). Take avocado production where 85% of the suppliers in Kenya are small-medium scale farmers and farmer groups, participation has been encouraged by farmer training and extension schemes, investment in small-scale irrigation and assistance in linking producers with exporters.

Contract farming has been used for smallholder farmers, where the contractor provides inputs and farmers gain increased access to export markets, but these binding contracts can amount to little return

on investments (Matui et al., 2016: 9). This inclusivity challenge demands more attention on the precarious terms of smallholder farmer integration as wholesalers have substantial market power in setting commodity prices as well as sourcing trends. Del Monte who had a stronghold on pineapple production stopped purchasing from smallholders and began relying entirely on its own production through technological inputs in new varieties (Minot and Ngigi, 2004: 17).

There is need for policies to focus on reducing transaction costs through investments in intermediary institutions, infrastructure, and farmers' associations so as to improve the bargaining positions of farmers in vertically co-ordinated food-supply chains.

Fruits and vegetables are one of Kenya's foremost foreign exchange earners and while over 90% of fresh fruit and vegetable production is sold regionally, exports have increased to European supermarkets through participation in global value chains (Krishnan, 2018; Dolan and Humphrey, 2000). Competition has intensified and many small and medium-sized exporters have shifted to growing crops for the large exporters rather than shouldering the risk of exporting (Dolan and Humphrey, 2000). In response to growing demands, and due to the perishability of fresh fruit and vegetables, the industry had to upgrade its processing capabilities: post-harvest facilities, transport and managerial and marketing and improve its standards and quality assurance.

To access global markets, producers have to adhere to increasingly stringent standards, such as Global GAP (a good agricultural practice standard), along with international government regulations (Henson and Humphrey 2010; Ouma, 2010). Coinciding with this expansion of export-orientated trade, Kenya's national food reserves have significantly declined since the 1990s and in the domestic market, consumer pricing priorities have been overtaken by growing demands for traceability and high quality fresh produce, highlighting both the challenges and opportunities of leasing land for high-value exports (Matui et al., 2016:8).

Three-quarters of Kenya's population depend on agricultural operations for a livelihood and the sector remains a major employer of labour (Lisk, 2011:231). Horticulture is a particularly labour-intensive sector and has experienced a shift from smallholder production to wage employment on large-scale farms and agro-processing. In the fresh fruit and vegetable subsector, value chain cluster upgrading has produced both welfare and employment positive effects along with increased risks and vulnerability. While logistics and quality challenges have been overcome through more efficient production and processing systems, there has been an increase in the casualization of labour.

Value upgrading has typically been stimulated through learning from global buyers who have imposed stringent requirements of the fresh-value chain and facilitated growing demands for convenience and just in time delivery (Dolan and Humphrey, 2000). Prepared fresh fruits and vegetables has created labour-intensive opportunities in agro-processing such as washing, peeling and pre-cut packaged goods. In terms of training, there is constraints to practical skills and training infrastructure and for a sector such as horticulture, which is knowledge-intensive, the continual mismatch of technologies and knowledge systems is a constraint to the sector (Matui et al, 2016).

Lessons Learnt

The promotion of horticultural clusters and fresh flower, fruit and vegetable value chains in Kenya has benefited from institutional coordination and innovation among related firms in the private sector along with varying degrees of support across different governments. Today, the State has reasserted itself within the regulatory sphere with a more co-produced framework that emphasises public-private cooperation, sector-wide standards and funding to R&D for agro-industries. Investments in logistics infrastructure for perishable exports through Kenya Airways and in quality and food safety assurance systems have been instrumental to attracting private sector investment and achieving export diversification.

The newly revised 2019 Kenyan regulations on Horticultural Crops sets out to adopt national and international standards to ensure compliance in the handling, processing, transportation and provides a framework for inter-agency collaboration through Horticulture Crops Directorate and the national food safety and traceability mechanism. However, the functions of this mandate and the duplication of taxation from the national and county governments need to be further harmonised. Cluster initiatives have helped to agglomerate foreign and joint-venture firms to benefit from reduced transaction costs and reach economies of scale, but the contributions of domestic MSEs and small-scale actors into value addition or direct trade remain limited; there is still the need to prioritise inclusive local value addition and secure domestic wage employment. Vertical coordination between farmers, traders and processors stands to benefit from further targeted state support to private domestic enterprises, especially through joint ventures in horticulture that drive local innovation: linkages aimed at value addition, export diversification and technological upgrading to reach economies of scale.

4.2.4 Case Study 4: Senegal Fisheries Sector - Seizing Opportunities for Export-orientation

Policy Context and Activity

With over 700 km of coastline on the Atlantic Ocean coastline and right next to an exclusive economic fishing zone of 206,000 sq. km, including a continental shelf of 23,800 sq. km. and sizeable inland waters, Senegal has access to some of the richest fishing grounds in the world owing to exceptional favourable natural conditions (Robert and Domain, 1977). The marine waters of Senegal are very productive, and the country has traditionally had a high dependence on wild fish for livelihoods, local food security and foreign exchange earnings. Senegal is widely recognised in the West African region as a fishing nation, and the fisheries sector plays an important role and makes a significant contribution to the Senegalese economy.

In 2016, Senegal's fisheries sector contributed nearly 15 per cent of total value of export earnings and accounted for 3.2 per cent of GDP (Diedhiou and Yang 2018; World Bank, 2018). The sector provides employment for an estimated 600,000 individuals (including occasional and indirect employment), or about 15 per cent of the country's total workforce, of which about 85,000 are full-time fishers (men and women) operating in marine and inland waters including some 52,000 directly employed in small-scale fisheries, and an estimated 48,000 working in auxiliary activities including artisanal and industrial fish processing and marketing. Women represent about 30 per cent of the total employment in the fisheries sector (Republique du Senegal, NPEM, 2018; Hall-Arber, 2012)). Thus, the sector plays a dominant role in the Government's strategy and policy for generating employment (Tall and Sidibe n.d.). Apart from providing jobs, the fisheries sector is a major source of the nation's food supply and accounts for about 70 per cent of all animal proteins consumed in the country (Belhabi et al, 2015).

Actors: The Role of the State: Promoting Economic Development through Fisheries

Successive Senegalese governments since independence in 1960 have accorded a high priority to the fisheries sector as a vehicle for promoting economic development especially among coastal fishing communities. Government recognition of the importance of the fisheries sector for the national economy has led to the establishment of a separate and authoritative Ministry of Fisheries and Maritime Economy [Ministere des Peches et de l'Economie Maritime (MPEM)], which has responsibility for managing and coordinating various activities of the sector (artisanal and industrial fishing, cold storage, processing, licensing and certification, etc.). MPEM's principal mandate is to promote sustainable fisheries development as a key driver of main development objectives[25], and it includes a directorate that is devoted to the transformation of the sector towards export-oriented industrialisation (Direction des Industries de Transformation de la Peche).

Over time, the Senegalese government has invested resources and knowledge toward improving fisheries management and rehabilitating fishing ecosystems damaged by non-sustainable fisheries practices. In building national capacity to manage the sector, government has benefitted from the assistance provided by its international development partners, such as World Bank, AfDB, EU and the Swiss, US, Canadian and Japanese governments (Ferraro et al, 2011; Niass and Faye, 2017).

The export component of the Senegal's fisheries sector owes its development and growth to the openness of the Senegalese economy, which has maintained longstanding trade relationships with Europe, Asia and other African countries. The Lome Convention of 1975, a trade and aid agreement between the EU (then the EEC) and about 70 African, Caribbean and Pacific (ACP) countries, provided the foundation for Senegal to direct its piscatorial exports to European markets on the basis of a system of trade and tariff preferences. It is estimated currently that EU markets currently absorbs up to 80 per cent of sea products from Africa, which is dominated by Senegalese exports. On its part, the Senegalese government has maintained a favourable policy environment to attract investment for its export-oriented fisheries industry. Senegal's Investment Code includes guarantees for access to foreign exchange and repatriation of capital and earnings, though transactions are subject to procedural requirements of financial regulation. There are no barriers to 100 per cent ownership of businesses by foreign investors, except in sectors that government and state-owned enterprises are active such as physical infrastructure, ports, and public utilities (Republic of Senegal, 2012). Additionally, government has concluded fishing agreements with advanced nations (e.g. Japan and Canada) authorizing their nationals to fish in Senegalese waters under certain conditions in exchange for financial compensation and technical assistance.

The government has always pursued an open access regime to artisanal fisheries with inducements in the form of tax exemptions and direct and indirect export

25 For example, the fisheries sector was identified as an important contributor to poverty reduction in the country's First and Second Poverty Reduction Strategy Papers (2003-2005 and 2006-2010 respectively).

subsidies that benefit domestic investors in the sector. These are linked to projects for industrial modernisation of small-scale businesses (e.g. reduced tax on motorised fishing apparatus, subsidized fuel, and institution of fishing sector financing bodies) - to help exporting enterprises for enhanced competitiveness and deeper penetration of external markets (Sarr, 2012). Effective monitoring and coordination by MPEM have helped to support export capacity and promote inclusion of small-scale processors, as well as minimise rivalry between national and foreign investors for coastal demersal catches and crustaceans.

On the whole, the attention and relatively high profile given to the fisheries sector by government in the national development agenda has produced a model of 'co-management' involving a range of stakeholders - fishermen, fishmongers, boat owners, fish transporters, cold storage landlords, processors, etc. – aimed at a better governance of the country's marine resources.

Actors: Private Sector Engagement: Fisheries processing sub-sector

The Senegalese fisheries processing sub-sector, which is made up of multipurpose economic activities, is entirely owned and managed by the private sector under the coordination of the state mainly through the MPEM. It consists of both small-scale artisanal and larger industrial scale fishing activities. Industrial fishing businesses include foreign and local industrial fishing vessels operating in Senegalese waters, fish processing plants producing fresh, frozen and canned products, fish meal production, cold storage facilities, foreign fishing boats (mainly from EU and Japan) catching and transporting high-value crustaceans and tuna. As of 31 December 2019, there were 168 registered fish processing units in the country, comprising of 95 freezer vessels, 55 land-based processing establishments and 3 cold stores in the Dakar region, and outside the capital 7 processing plants in Theis, 5 in Ziguinchor and 1 in Saint Louis regions.

Additionally, about 52,000 individuals are directly employed in small-scale fisheries, with women play an important role in artisanal processing including, drying, salting, smoking and fermenting (USAID/ COMFISH, 2015; Hall-Arber, 2012). The relationship between the state and the private sector is governed by a series of fisheries legislation and regulations with the overarching twin objectives of contributing to economic development and protecting the country's fisheries resources. The legal and regulatory framework is based on fiscal policies and fishing rights (e.g. tax payments and exemptions, licensing fees, export promotion) and management measures (e.g. fishing methods and limits, co-management involving foreign and local businesses, fishing rights, national registration, and vessels restrictions.

Performance Evaluation and Lessons learnt
Overall, the Senegalese fisheries sector has continued to play a critical role in the economy of the country, in terms of employment, food security and revenue. Reflecting on fisheries policies and performance over the years, consistency in terms of political commitment, policy effectiveness and proper institutional arrangement for managing the sector and its resources by different Senegalese political regimes since independence have impacted on the significant contribution of the sector to economic development. However, there are still areas that need improvement.

Senegal's open access regime to artisanal fisheries may be contributing to the depletion of marine resources. Illegal fishing and overfishing by larger motorised vessels also threaten critical resources, as indicated more recently by signs of declining volumes of landings for industrial processing. There is a need to prioritise and intensify sustainable fisheries development and management programme, to reduce pressure on fishing resources, especially demersal coastal catch taken by small-scale artisanal fishermen. Issues pertaining to the declining stock of certain species, lead to the problematic question of quota fishing agreements and support mechanism, which must be addressed by the Senegalese government as a matter of priority. The authorities should take specific management measures and regulations for the protection and restoration of habitats and over-exploited marine resources. It may also be necessary to improve clusters of parking areas for fish and seafood wholesalers and their suppliers to trigger economies of scale benefits.

Additional government support should aim to facilitate broad-based participation of stakeholders or interested parties in the decision-making process that affects the management and allocation of benefits from operations within the fisheries sector. There is a need to reflect on how to fully integrate stakeholders into fisheries policies, for resource sustainability and development of the sector. For example, although women play critical roles in the sector, they are grossly underrepresented in fisheries 'governing bodies' (e.g. co-management approaches and decision-making concerning growth, development and sustainability of fisheries), apparently because cultural factors hinder their ability to contribute to the decision-making process. Their involvement in decision-making as stakeholders is thought to be essential from the standpoint of both their roles in addressing household nutritional needs and contribution to the management of marine resources (Hall-Arber, 2012; USAID/ COMFISH, 2015). Wider representation with respect

to consultation and decision-making processes could help to prevent exploitation of small scale-fishermen by wholesalers and processors in transactions.

In conclusion and looking into the future, the fisheries sector could face the challenge from conflict among socio-economic and environmental aims. There may be need for more reforms beyond the provisions of the new Maritime Fisheries Code or the Fisheries Act of 2015, to simultaneously capture economic development gains and protect fisheries resources. This might require new technology to support enforcement of regulations such as satellite tracking and electronic logbook for foreign and artisanal vessels (D'Alessandro, 2020). At the same time, it is necessary to arrest the trend of declining fisheries productivity, linked to overfishing of coastal species, in order to safeguard incomes and livelihoods of local fishermen; in this regard, state support through specific capacity-building and productivity-enhancing measures and technology for provision of reliable information on quantity and location of fish stocks could be considered. Reforms could be approached on the basis of the principle of sharing of responsibility for the management of the fisheries sector between government and private sector stakeholders.

4.2.5 Study 5: Agropoles: A Moroccan Green Plan for Aggregation

Context and Activity

The Green Morocco Plan (Plan Maroc Vert) sets out to implement the Kingdom of Morocco's agricultural strategy (2008-2020) by increasing the sector's productivity through agro-industrial processing, economic value-adding activities and sustainable resource management. The PMV aims to boost private agribusiness investments and patterns of agricultural aggregation capable of transforming agricultural productivity and reducing rural poverty. It is split into two components: (1) 'green agriculture sector governance' to strengthen the legal, regulatory and institutional framework in the agricultural sector and (2) inclusive development of agricultural sector value chains. Under the National Industrial Acceleration Plan (2014-2020), the government has simultaneously integrated the agri-food sector by promoting and restructuring strategic sub-sectors: staple foodstuffs and high-value exports, and implemented Agropoles-integrated logistics platforms-as the favoured spatial approach to transform agriculture into a business sector capable of synergizing with the wider economy.

These policy frameworks have come about in response to a series of challenges facing the sector's stagnant economic competitiveness: (1) agricultural production is characterised by a high number of smallholdings with limited market integration, (2) the agricultural value chain is highly fragmented and not sufficiently developed, (3) agro-industrial products are disproportionally destined for the domestic market, with exported goods accounting for a minority per cent of total industrial exports and (4) the majority of revenues derive from the processing of imported products (milling, tobacco, sugar beverages) opposed to domestic value addition to local agricultural production (World Bank, 2017).

Actors and Drivers: Institutional environment and legal reforms: Attracting the private sector

The Ministry of Agriculture, Marine Fisheries, Rural Development, Water and Forests (MAPMDREF) is responsible for elaborating and implementing the Government's agriculture and rural development policy. An important step for the implementation of the first component the Green Morocco Plan was the legal update of legislative and regulatory instruments and actors governing the agriculture sector. These adaptations include the legal frameworks governing: agricultural production (Decree No. 2-13-359), agricultural and fishery inter-trade organisations (Law No. 03-13), agricultural aggregation (Law No. 04-12) for scaling and improving the inclusivity of aggregation projects, and the legal frameworks governing the safety of food products and the protection of the quality of local organic products (Law No. 39-12), local origin and quality labels (Law No. 25-06) and agricultural counsel (Law No. 58-12) to create the National Agricultural Advisory Agency.

These legal reforms have been accompanied by institutional reforms of government agencies and public intervention in the agriculture sector. Coordination was particularly weak among public actors (agencies and ministries), private actors (within value chains) and between the public and private sectors (promotion of trade agreements) (AfDB, 2015:5). The reorganisation of the MAPMDREF has helped to overcome these coordination challenges by devolving greater decision-making powers to the regional and local levels. It has refocused its core regulatory functions while service delivery and investment support in agriculture have been delegated to autonomous agencies and to the private sector through public-private partnerships.

The establishment of the Agricultural Development Agency (ADA) to promote private investment in the sector, a National Authority for Food Security and Safety regulating phytosanitary products and traceability (ONSSA), and the National Agricultural Extension Agency (ONCA) responsible for training and advisory services to producers, are key examples of how institutional reform has helped to refocus the

division of labour between government agencies and create an enabling environment to crowd in additional private investment. Between 2008-2018, 104 Billion MAD worth of investments were gained thanks in part to these reforms, with 40% from public investments and 60% from private investments (ADA, 2018). Public-private dialogue and value chain integration has benefited from intra-branch professional associations— 'Interprofessions', institutionalized in 2012 and legally mandated to organize private operators (producers, processors and exporters) in the sub-sector that they represent to implement market research and development, research and extension programs, disseminate standards and promote labels of quality.

The quality safeguarding of local territory products has received increased attention. Following the promulgation of the Law No. 25-06 on the rules of origin, which includes geographic indications, appellations of origin, and agricultural labels— specific quality schemes that have proven to be particularly effective tools for differentiating agri-food products and generating added value in targeted agri-food markets— there has been some progress made on the conditions and process for recognizing national as well as international origin products (World Bank, 2017). This has helped to establish the accreditation requirements for 'signes distinctifs d'origine et de qualité' (SDOQ) certification bodies that present the official labels for certified products. However, while Morocco has extensive experience with SDOQs, their socio-economic impact has been limited so far (World Bank, 2017). The Agricultural Development Agency (2018) records the recognition of 62 labelled products and the World Bank has noted 53 products recognized as SDOQs in Morocco as of 2017. Yet both certified and non-certified producer organizations continue to face challenges in disseminating knowledge of certification standards and criteria; in developing and managing processing capacities; in maintaining transparent business management systems; and finding stable marketing outlets (World Bank, 2017).

Actors and Drivers: Aggregation: Incentives and Support to Producers and Buyers

The amendments regarding aggregation of production have encouraged vertical and horizontal integration along priority value-chains (World Bank, 2017). The law regulates contractual arrangements between producers (agrégés) and buyers (agrégateur) in the context of an aggregation project, and legally defines aggregation (agrégation agricole) as the voluntary association of a group of producers with a specific buyer through a contract (contrat d'agrégation) defining both the technical support to be provided by the buyer to those producers and the conditions for the purchase of their production.

These aggregation projects must aim to meet the following objectives: (1) improved organization of agricultural production through technical assistance for producers, and collective purchase and/or use of production inputs and equipment, (2) facilitating access to finance and/or agricultural insurance, (3) enhanced market access for producers, and (4) value-addition for agri-food products (through conditioning, storage, processing). Regarding the establishment of an incentive system dedicated to aggregation projects, 63 aggregation projects covering a total

area of 177,000 hectares have been implemented for the benefit of 55,000 farmers, 80% of whom are small farmers owning less than 5 hectares (Agricultural Development Agency, 2018).

This aggregation focus is important in light of the composition of the agri-food sector made up of some 2,0505 industrial units, mainly SMEs, and 143,000 employees. Most of this activity rests on simple value addition of dominant products including milled cereals, oil, canned fruits and vegetables, canned fish, and animal feed (World Bank, 2017). Further capacity is required for SMEs to comply with stringent (public and private) food safety, quality, traceability, labelling and environmental sustainability requirements imposed by high value export markets that Morocco intends to diversify production towards (World Bank, 2017).

The performance of SMEs is also hindered by binding constraints at the firm level: limited investment, lack of capacity for product innovation, poor access to marketing networks and lack of skilled labor to meet the contemporary needs of the agri-food sector. This is not aided by the fact that Government-run support to SMEs is fragmented and uncoordinated with unclear division of labour between ministries and competing objectives (World Bank, 2017). Agricultural cooperatives would help to further integrate smaller-scale producers into aggregation agreements with buyers who are better positioned to access the shared agro-industrial processing benefits available at the agropoles and larger production chains connected to international markets. The simplification of the legal status of cooperatives in 2014 has made it easier and cheaper for farmers to develop new horizontal partnerships but further targeted assistance can be made to scale up this partnership-building and tap into the supply of raw production for higher-value agricultural activities. Steps have also been taken to increase the accessibility of investment support to a larger range of agribusiness stakeholders.

The investment support and incentives aimed at leveraging private sector value-addition and value-chain development are provided through the Agricultural Development Fund (FDA, 2019).[26] Incentives range from specific financial support to inputs for aggregation projects (machinery, irrigation systems), to inclusive subsidies for vegetable and animal sectors production and processing (winter cereals, organic citrus fruits, olive tree and rose perfume processing/and or packaging units) (FDA, 2019). To be eligible for financial support, projects must meet the legal requirements and be validated by the regional committees charged with evaluating aggregation project proposals. Most importantly, private investments in modern equipment and technologies, and for aggregation projects targeting small and medium producers, must enter in commercial partnerships with processors (agrégateurs). This is based on state intervention in the framework of a partnership with beneficiaries grouped together in representative professional organizations. The Agricultural Development Agency is in regular review of the aggregation model and has made various adjustments to simplify the requirements and scale uptake by producers and buyers (World Bank, 2017). It continues to update the model based on experience and to make it more accessible for operators of lower organisational capacity (e.g., cooperatives).

To improve the governments assistance to commercial partnerships between producers

26 Up to 10% of investment is backed by a contribution by the Agricultural Development Fund.

and buyers the following interventions have been considered: communication campaigns, technical financial assistance, administrative simplification and amendment of the aggregation law to enable agrégateurs of fruit and vegetables to sell directly to supermarkets and other modern commercialization platforms. This aggregation model has also contributed to the strategy behind the country's experimentation with agropoles, where a mix of regional and foreign agribusinesses have invested in units to carry out agro-processing and value-upgrading activities.

Performance Evaluation

Meknes and Berkane Agropoles

Under phase I of the PMV plans were put in place to establish six agropoles at Meknès, Berkane, Tadla, Souss, Haouz and Gharb to enhance the value of agricultural products through aggregation, enabling farmers to share production, distribution and marketing methods to improve their competitiveness.[27] Each agropole consists of an integrated area of agro-industrial activities for production companies; a logistics and services zone which includes service companies, business incubators, technology and distribution platforms; a Qualipolis for R&D facilities ensuring quality and food standards; and a Zoopolis for skills promotion and certified professional agro-industrial training. The agropoles prioritise greater upstream transformation and marketing through better contractual relations among private sector actors, cooperatives, inter-trade organisations and business support services.[28] The marketing of plots for the Meknès and Berkane agropoles were launched in 2011, and in 2015 five investors had completed construction of their units and started business, while 13 were under construction (AfDB, 2015).

However, the agropoles have faced implementation delays, and as of 2017 only two (Meknès and Berkane), developed by 'MedZ' a subsidiary of the Caisse de depot et de gestion (CDG)[29] were operational and being marketed (IISD, 2017). Even these two operational agropoles have not been as widely embraced by agribusiness industry players as hoped, with the head of the agribusiness division at the Ministry of Agriculture recognising the slower pace of filling the units inside the agropoles (Salem, 2015). The Meknès project had only 21 per cent of its area occupied due to challenges linked with the design of the agropole strategy itself and its underpinning aggregation model. The grouping of farmers around private actors (aggregators) with strong managerial capacity in order to deal with land fragmentation and to ensure that aggregated holdings have access to modern production techniques has been difficult to operationalise on the ground (IISD, 2017).

The Meknès agropole, 'Agropolis' commenced its first phase of commercialization in 2010 with a total area of 150 ha and 380 lots, offering investors operating mainly in the agri-food sector a shared environment with quality infrastructure and connectivity to a large employment catchment area. The Fès-Meknes region has locational advantages given its well-developed agro-industrial base and water resources, and the 'Agropolis' helps to tackle the export-oriented horticultural and olive oil chains as well as those of milk, cereals and red meat intended primarily for local markets. The food industry represents more than half of the region's industrial turnover and leading domestic and multinational agro-industries are present in the region, along with several research and higher education institutes (FAO, 2011). Proximity to the Fes airport and Rabat-Fes highway offer greater scope for transport links to regional and international trade. It also offers a platform for local products through the 'Regional Products Development Agency', dedicated to grouping and marketing local products from the Meknes region. The agropole integrates an agro-industrial zone, a logistics hub and communal facilities, a service park (ICT and agribusiness support services) and a RTD park, where food quality laboratories are located. Tenants activities range from meat processing, canned goods and bio inputs, and as of 2020 it still had 50 ha and 156 lots available for investors. The 'Agripole innovation Meknes' or 'Agrinova' is the cluster association located in the Meknès Qualipole coordinating public-private partnerships between agro-industrial companies, inter-professional organizations, research training institutions and public authorities to help upgrade the upstream levels of the agricultural sector.[30]

27 The AfDB financially supported the creation of agropoles (Berkane and Meknès) under the first phase of the PMV 'PAPMV-1' (2012-2014) and has continued support through the AfDB 'PAPMV-2' support programme co-financed by JICA (USD 132 million) through the Accelerated Co-financing Facility for Africa (ACFA). The AfDB complements other operations in Morocco funded by the European Union and the World Bank to help implement the components of the Green Morocco Plan.

28 Agropole strategies tend to work best when dealing with high-value export-oriented products, and usually have less scope targeting staple food production and food security.

29 MedZ, owned by the CDG (a state-owned financial institution) is a Deposit and Management Fund Group and first institutional investor helping to implement the government's sectoral strategies including Tourism (Azur Plan, 2020 Vision), Industry (Emergence Plan) and Agri-cultural development (Green Morocco Plan).

30 Agrinova has facilitated business-to-business meetings with its members and coordinated innovation projects related to the following niche themes: value addition to tomato by-products, supporting local varieties of soft wheat with baking performance, adaptation of figs,

A closer look inside Agropolis: From Bio-Inputs to Extra Virgin Olive Oil

'Éléphant Vert' falls under the Swiss commercial group, Swiss Foundation Antenna Technologies and has two production units and one production centre situated among the 124 units based at Agropolis. Their focus is on the bio-inputs sector, value chain integration, cluster coordination among key industry players and R&D through international partnerships with other countries. With biofertilizer and biopesticide production units, it is also home to the companies R&D laboratories. It employs just under 100 workers (salespersons, technicians and administrative staff) and plans for a new production unit for bacterial products and a glasshouse for mycorrhizal fungi are underway. Another company processing within the agropole is 'Al Dahra', a prominent UAE owned multinational leader in agribusiness, specializing in the cultivation, production and trading of animal feed, essential food commodities and end-to-end supply chain management. After acquiring 'Oliva farms', Al Dahra now operates an intensive olive farming agribusiness, and through the Meknes agropole are tapping into the olive oil production and processing industry.

The planned production of extra virgin olive oil is targeted for bulk trading and retail in markets including the GCC, the Middle East, Europe and North Africa. The European Bank for Reconstruction and Development financed a EUR 5 million loan for 'Al Dahra Morocco Factories' to finance the construction and commissioning of a new olive oil factory in the Meknès Agropolis. The Project will enable Al Dahra to leverage on their existing olive farms in the Fez-Meknes region and aggregate other olive farmers, to integrate downstream into production of olive oil mainly targeting the export market (EBRD, 2019). Both Éléphant Vert' and 'Al Dahra' are among the members of 'Agrinova', the agro-industry competiveness cluster located in the qualipole targeting the territorial and economic development of the surrounding region.

The Agropole of Berkane covering over 100 ha and 61 industrial lots, hosts a food marketing and processing zone, a logistic platform, and a service zone (FAO, 2011). It was launched as an integrated agri-food project with infrastructure, logistics services to help attract agribusiness investors operating in the citrus, olive oil and vegetable chains. Morocco's strong comparative advantage in citrus production was targeted since it represents 31 percent of fresh agri-food exports, generates approximately US$350 million per year in foreign exchange revenues and employs between 59,000 and 97,000 (Maroc Citrus, 2017). The industrial area also includes a cooperative specialising in dairy products and cheese exports and an adjacent park dedicated to standards and quality control for food products constructed and financed by the Ministry of Agriculture and Fisheries (€8.4 million).

With its locational advantages in the Oriental region, and at the crossroads of Europe, the Maghreb and Africa, this agropole benefits from its proximity to the ports of Béni Nassar and Melilia; market access to Spain and Algeria and the El Araoui and Oujda Angad airports. As of 2016, 12 industrial units were built, mostly cooperatives and small SMEs and the agropole was projected to generate between 5,000 and 7,000 direct jobs with a strong employment catchment area.[31] Investors in the plots include a mix of international and domestic firms such as the Moroccan group Diana Holding (a major player in the Moroccan food agro-industry) who bought 5 ha of land in the Berkane Agropole to build a Dh200 million (€18.5m) fruit and vegetable packaging factory to export to international markets was scheduled to open by the end of 2017 and employ 500 people.

However, the overall success of the Berkane agropole has been complicated by the price of land, the key point of contention in between the industry operators and the site developer, MedZ. While prices range between 250 and 500 dirhams per square meter for the agropolis of Meknes, in Berkane the prices are more expensive and not aligned with industrial demand. Striking a better balance between the cost of land and the local agribusiness market will help to influence the competitiveness of the price and therefore of exports. There has been a low uptake of the units based within the agropole, in part due to its limited promotion among the regional and international agribusiness communities, a challenged recognised by the head of the agribusiness division at the Ministry of Agriculture. This has slowed investments generated on the site to

peaches and nectarines to different hybrid solar drying processes.

31 The region offers an available and qualified workforce. However, labour costs are particularly low, with the average monthly wage in Morocco is actually of 327 €, 10 times less than the average monthly wage in Spain (MedZ).

approximately Dh 300 million, significantly lower than the investments generated at the Meknes Agropolis (Dh 1.3 billion) and employment at Berkane (700) compared to Meknes (3,500) and the initial 5000 jobs that Berkane agropole was expected to achieve.

To boost the visibility of the benefits that investors can enjoy, further promotional action needs to be made through an integrated incentives framework that communicates the services, logistics and agribusiness support on offer at the Berkane agropole and the spatial pool of employment. The local monitoring committee chaired by the governor of the province based at the Regional Office of Agricultural Development of Tafilalet has helped to coordinate several meetings between the developer MedZ, investors and external services, in order to overcome the legal (land pricing), technical and promotional challenges.

Lessons Learnt

The Next Steps for the Green Morocco Plan: Expanding and Diversifying Value Chain Development

The government's agropoles and aggregation strategy under the first phase of the PMV (2008-2014) was reviewed in 2014 and recommended a shift in emphasis towards the promotion of investments in value-addition, agri-food processing and market diversification. Achievements have been made at the institutional level through important legal and organisational reforms, and results at the farm level with the expansion of production and productivity gains. However, greater emphasis is still needed on value-chain development beyond the farm gate, market diversification and attracting more private sector investments to the agropoles.

The second component of the PMV should help to refocus implementation support to projects related to: 'reconversion' substituting cereals in fragile areas with higher value-added crops; 'intensification' improving productivity and enhancement of existing productions and 'diversification' creating additional farm income through niche productions (saffron, honey, medicinal plants) (ADA, 2020). While the government has supported the intensification of higher-value production, this recent support needs to be matched with increased investments in value addition in response to market demand. The Agropoles host the locational advantages for these high-value subsectors but more targeted exposure and canvassing is needed to promote the vacant units. The price of land has been a key constraint in attracting investment and must be better aligned with industrial demand of regional and international investors. The agribusiness sector stands to benefit from more targeted focus aimed at addressing constraints that producers and agribusiness firms in agro-value chains are facing, i.e. value-addition, product quality, and market integration (World Bank, 2017). SMEs who typically make up the majority of the sector will be the key actors to help drive this process but as it stands their production needs to be more sustainably linked upstream with aggregators capable of transforming large volumes of raw inputs through downstream processing and connecting to the agropoles.

4.2.60 Study 6: The Agro-processing industry in Ghana - Assessment of Strategies, Potentials and (Missed) Opportunities

Policy Context and Activity: Prospects for Agro-industrialisation

Ghana is primarily an agricultural country producing primary commodities for export and a wide range of staple crops mainly for domestic consumption. The agricultural sector[32] is the largest employer of labour and major source of livelihood for the rural population, and production is mostly undertaken by small-holder farmers at relatively low levels of productivity. Successive governments have initiated strategies and policies to develop, modernize and transform agriculture in Ghana[33], and taken steps to improve productivity and food security by aligning national programmes for agricultural development and transformation with policy guidelines, goals and targets of the major African Union (AU) Comprehensive Africa Agricultural Development Programme (CAADP) declarations.[34] Some of Ghana's national policies and plans for agricultural development have included provisions for developing its nascent agro-processing industry through cooperation with the private sector.[35] The Ghana Trade Policy which seeks to increase the country's competitiveness in international and domestic markets, recognises the potential of the agricultural sector through value-addition processing of primary commodities and non-traditional exports.

32 The sector is divided into five sub-sectors: cocoa the main export crop, other crops, forestry, fisheries and livestock. Cocoa and crops account for over two-thirds of the sector's production, and agro-processing in some form is dominant in these two sub-sectors

33 For example, the Food and Agriculture Sector Development Policy (FASDEP), the Medium-Term Agriculture Sector Investment Plan (METASIP), the Agricultural Diversification Project (ADP), and the Agricultural Sector Investment Project (ASIP).

34 The Maputo Declaration of 2003 and the Malabo Declaration of 2014

35 The main thrust has been on processing of major food staples like maize, cassava, yam, cowpea and palm oil and fish smoking for domestic consumption, and less on processing of locally produced commodities for exports.

However, in general political will and commitment to the transformation of agriculture has not been strong, and agriculture has rarely been accorded a top priority status in national development planning. This is partly reflected in the relatively small share of agriculture in total national expenditure, which has never exceeded 10 per cent per annum. At the same time as failing to prioritise agriculture in the development agenda, different political regimes since independence in 1957 have tried to move into labour-intensive manufactures (of the type that have dominated export-led growth of Asian economies) as a pathway to industrialisation and economic transformation (Nti, 2015). Admittedly, it has so far been difficult to find success in this approach as an export-oriented development strategy (Osei and Jedwab, 2016). Despite achieving middle-income status by the end of the first decade of the new millennium, there has been very little industrialisation in Ghana while services have grown rapidly. This trend combined with the neglect of agriculture has seen the sector's share in GDP decline progressively from close to 50 per cent in 1985, to about 40 per cent in 1995, around 30 per cent in 2005 and below 20 per cent in 2017. Noting that Ghana is primarily an agricultural economy, it is worth examining prospects for an agro-processing pathway to industrialisation.

Actors: Role of the State: Prospect for promoting industrial development through Agro- processing

Ghana possesses comparative advantages for the development and growth of an export-oriented agro-industrial processing business. The country has adequate and strategically located infrastructure – roads and transport facilities, ports, airports, power supply - around the main export crop producing areas, good agro-ecological conditions for high-value horticultural products, diversity of commodities that may be easily processed, large and fairly literate unemployed youth workforce, relative proximity to European export markets. Overall, the country's policy environment now is conducive to private sector-led industrialisation, compared to the earlier post-independence era when state-owned enterprises dominated (Owoo and Page, 2017). At present, agro-industrial processing in Ghana is still underdeveloped (Sutton and Kpentey, 2012). The agro-processing industry is dominated by micro and small artisanal enterprises operating below capacity and using inefficient and outdated technologies, characterised by a relatively low degree of value addition to agricultural commodities, and having few linkages with financial and marketing services.

Given Ghana's comparative advantages that favour agro-processing, it can be argued that government should seek to pursue alternative approaches to industrialisation through adding value to agricultural commodities and developing new high-value agricultural and horticultural products (e.g. tropical fruits and fresh flowers) for exports. Apart from the potential to earn more foreign exchange from value-addition to exports, the growth of the agro-processing industry will create wage jobs for unemployed youth in rural and peri-urban areas. Furthermore, agro-processing in Ghana could generate increased demand for the products of other industries and sectors through backward and forward linkages. Noting the critical position of the agricultural sector in the economy of Ghana, it is reasonable to assume that agro-processing has the potential to contribute meaningfully to the transformation of the economy through improvements in the sector's land and labour productivity and market opportunities.

It is therefore necessary for government to fulfil the role of an enabler, through appropriate policies and incentives, to attract private investments for the development and expansion of agro-industrial processing activities aimed at both export and domestic markets. One can also speculate on how growth in intra-African trade (contingent on the successful implementation of the AfCFTA) may provide additional opportunity for agro-processing businesses in Ghana to do cross-border and intra-African trade. African markets for value-added processed food are set to grow among middle class consumers as their income rises and with rapid urbanisation.

At present, agro-industrial processing in Ghana is still underdeveloped (Sutton and Kpentey, 2012). The agro-processing industry is dominated by micro and small artisanal enterprises operating below capacity and using inefficient and outdated technologies, characterised by a relatively low degree of value addition to agricultural commodities, and having few linkages with financial and marketing services. There are a handful of medium-sized enterprises that have attempted to seize opportunities created by globalisation and associated changes in the costs and allocation of factors (skills and capital), combined with Ghana's relatively good infrastructure, transport and logistics, to operate agro-processing businesses in the country.

The experiences of a few of these businesses are summarised below to assess prospects for agro-industrialisation in Ghana. The good example of a country like Thailand that has been very active in agro-processing for exports mostly using domestically produced inputs could serve as a benchmark. This might highlight the need for a dynamic and efficient supporting role by the state to exploit costs and logistics advantages created by globalisation and enhanced supply chains, and attract foreign investors who are willing to bring capital and knowledge for agro-industrial processing in Ghana. It will also throw light on the critical issues of incentives for investment in agro-industrial processing aimed at export

markets including tax holidays, import duty waiver for agricultural machinery and inputs.

Actors: Private Sector Engagement: Some Examples

Illustrative examples from the agro-processing sector in contemporary Ghana[36] are presented below to highlight challenges and prospects for the sector to become the engine of growth for agricultural transformation and rural development (Ampadu-Ameyaw and Omari, 2015). The examples summarised below are drawn from the cocoa industry and non-traditional high-value export crops, and the analysis is done against the background of the concept of the SAPZ model and its objectives, drivers and expected outcomes. The examples yield lessons concerning the extent to which domestic and international factors could affect opportunities to promote agro-industrialisation as a vehicle for joining regional and global value and chains. and tapping into exports markets. The examples also show that there are obstacles that must be addressed. To succeed in agro-industrial processing for export, the economy and specifically producers must become and remain internationally competitive (Buntrup, 2015). This requires higher rates of labour productivity, keeping up with new knowledge and improved technology and 'learning by doing' innovation. Also, some agro-processors producing value-added products for exports are affected by lack of access or shortage of intermediate inputs, such as imported materials for packaging materials, needed to produce and substantially expand the range of their products. More importantly, there is the important issue of access to external markets. In the case of the EU which is the largest destination for SSA's agro-processed and horticultural exports, obstacles to market access relate to international standards, quality and certification and deliberately high protectionist tariff on value added processed products as a compared with preferential rate on raw and bulk exports – case of cocoa beans and value-added derivatives such as chocolate and cocoa powder products.

Example 1: Blue Skies Ghana Ltd

Blue Skies Ghana Ltd, a foreign-owned company founded by UK-based entrepreneur (Anthony Pile) in 1998, is one of the largest agro-processing businesses in Ghana with over 1,500 employees. It processes pineapples and other local fresh cut fruits (mango, papaya, coconut, passion fruit and banana) into fruit juice for both local and international markets, which includes UK, France, Italy and South Africa. Most of its input supplies come from individual smallholder farms with which the company deals directly. It is estimated that Blue Skies Ghana Ltd purchases over 1,750 tonnes of fresh fruits from local growers monthly during season for processing into fresh and pasteurised fruit juices (Owoo and Lambon-Quayefio, 2017). The company also supplements its inputs with imported fruits from countries where it now has subsidiaries (e.g. pomegranates from Egypt, melons from South Africa and mangoes from Brazil).

Sourcing most of its raw material supplies locally has established vital market linkage directly with local small-scale farmers who benefit from an assured market for their products and access to international markets in some instances. Over the years, the company has been able to access primarily UK-based supermarkets, a factor attributed to the founder's origin and networks within the EU supermarkets industry. The close proximity of the processing factory to growers facilitates transactions in the vital relationship between processor and supplier. Prompt payment for deliveries at competitive rates ensure that the farmers have a regular source of income and savings for re-investment in their farms. Additionally, Blue Skies provides technical advice and training on agricultural methods to over 150 farmers it deals with, as well as assist with provision of shared farm equipment and pre-financing of sales when necessary. Accordingly, the farmers have remained loyal in their supply of fresh fruits on schedule to meet the company's demands for quality and timely delivery for value-chain processing and export. It is possible that with appropriate policy and business support from the government - regulatory reform, tax and export incentives – Blue Skies could perform even better in terms of growth and expansion.

Example 2: Golden Exotics Ltd (GEL)

Golden Exotics Ltd (GEL) is a leading producer of fresh pineapples and bananas for exports in Ghana. The company which was established in 2003 is a subsidiary of the Group Compagnie Fruitiere – a French company with its head office in Marseille and leading producer of fruits and vegetables in overseas countries for the EU markets. GEL owns and manages two plantations which together cover over 8,600 hectares. One plantation is devoted to pineapples and harvests about 100,000 tons per year, and the other to banana production with an annual output of fresh product of some 50,000 tons. These plantations are strategically located in the south of the country which is well served by an abundance of water from the Volta river with fertile land that is suitable for producing high-quality organic fruits, and linked to the main airports and seaports by good transport networks.

36 Ghana has a myriad of small and micro-sized agro-processing enterprises scattered across the country, the majority operating at low levels of production capacity and technological efficiency.

The products of the company are exported to France, Italy, Belgium in Europe and also to Senegal and Burkina Faso in West Africa. More recently, GEL's operations have been adversely affected by a series of problems linked mainly to weak management and insufficient coordination in its relationship with the authorities. The company was forced to shut down its banana plantation operations in Kasunya in 2019 due to labour unrest over wages and bonuses. Other problems include destruction of its farmlands due to poor security and insufficient harmonisation of their objectives with the interests of the local communities. Failure to invest in new varieties of pineapples in its Obom plantation led to loss of markets and missed opportunity for expansion, which resulted in the company having to lay off about 800 of its 1000 workforce.

Example 3: Cocoa-based agro-processing

Several local Ghanaian firms are engaged in processing of cocoa beans into a range of cocoa products (chocolates, cocoa butter, cocoa liquor, cocoa beverages, cocoa powder, cocoa cake and other cocoa derivatives) for export as well as local consumption. These include Asarco Cocoa Processing Company Ltd (ACPC) which was established in 2006 as a wholly Ghanaian owned food and beverages processing business based in Accra; Afrotropic Cocoa Processing Ltd (ATCP), established in 2005 and manufacturing quality cocoa products including chocolates and cocoa butter for export and domestic markets; and Plot Ghana Ltd which is located close to Takoradi port produces natural cocoa butter and cocoa cake (Owoo and Lambon-Quayefio, 2017; Afful-Koomson et al, 2014)). Most of these cocoa processing firms are located around or near Accra, Takoradi and Kumasi and, therefore, benefit from good infrastructure (roads, ports, power supply, etc.), close proximity to ports and airports and are also not far from the sources of their input supplies. Some of them have international certifications which have enabled this sub-sector of the cocoa industry to export its processed products to the USA, Europe (France, Spain, UK, Ukraine, Holland, Hungary, Ukraine), China, Thailand, Singapore, Hungary, Brazil and Japan. However, it would appear that authorities like the Ministry of Food and Agriculture and Ghana Export Promotion Authority (GEPA) have not seized the opportunity to provide an enabling policy environment and support for improving and scaling up of these micro and small-sized cocoa processing operations, including considering the advantages of clustering.

Performance Evaluation and Lessons learnt

The agro-processing industry in Ghana is still in nascent stages and not well organised in terms of access to marketing and financial services and linkages with other sectors of the economy. Due to the smallness and dispersal of production units, the industry is not able to benefit from economies of scale associated with agglomeration. According to one report, 85 per cent of all agro-processing firms in Ghana are micro-enterprises, 7 per cent are very small firms, 5 per cent are small firms, and only per cent are medium-sized firms (Afful-Koomson et al, 2014). Limitation on the scale of production in the agro-processing industry is translated into constraints and disadvantages in terms of high operating and transaction costs and regulatory barriers, compared to larger firms. From an institutional perspective, there is need for improved coordination of government policies implemented variously by the Ministry of Food and Agriculture, Ministry of Trade and Industry, Ministry of Finance, Ministry of Labour, GEPA, Ghana Standards Authority, etc. This pertains to fiscal and other incentives by government for attracting private investments, trade and export promotion strategies and policies, technology transfer and technical innovation, and business-friendly regulatory instruments.

As regards diversification into horticultural products for exports (fresh tropical fruits and concentrates for fruit juices), the experience so far suggests that Ghanaian enterprises must invest in technology and keep abreast with practical knowledge and technical breakthroughs about product variety and quality, consumer preferences and global market trends. In the case of foreign-owned large enterprises, it is important for investors and managers to become familiar with traditional values and customs of local communities where they operate, improve on their corporate social responsibility and labour relations with respect to decent working conditions.

Despite its disadvantages, it can be concluded that the agro-processing industry in Ghana has the potential to play a significant role in the transformation of the agricultural sector and the overall economy. Derived from small-holder agriculture which is an important source of employment and income generation for rural communities, the agro-processing industry can impact on the lives and livelihoods of the majority of the country's population including women who dominate staple crops processing and certain activities like fish smoking and palm oil extraction, and promote inclusive growth and sustainable development

(Ampadu-Ameyaw and Omari, 2015). Clearly, there is a need to increase public spending on agriculture overall and promote the development of agricultural value chains in order to fulfil the country's comparative advantages in agro-industrial processing and realise its food import-substitution and export potential

4.2.7 Case Study 7: South Africa - Local Economic Development through Agriculture

Context and Activity

The impact of Apartheid and its legacy on agriculture and agribusiness development

Since democratisation in 1994, the South African state has initiated policies and programmes to redress the negative impact of apartheid and its legacy on the previously marginalised groups by increasing economic participation and improving access to resources and opportunities.[37] In the agricultural sector, the main challenge has been to promote inclusive growth in a sector that has historically been disproportionately dominated by white farmers. Specifically, with respect to the agro-industrial processing sub-sector, which is relevant to the AfDB's SAPZ model, the main question again is how to get the process to become inclusive in terms of the effective participation of the majority black population as beneficial stakeholders.

While South Africa has traditionally attained a high level of agro-industrialisation based on processing of meat products, food crops, fruits, wine-makings, etc. for both the domestic, regional and international markets, the apartheid system which existed before democratisation in 1994 had denied access to arable land and other productive resources including capital as well as socio-economic opportunities to the majority non-white population. A quarter-century later, however, it seems that programmes and schemes introduced by the state to reduce inequality and promote inclusive growth through economic participation have so far not been very successful.

Within the broad framework of the BEE, a Black Economic Empowerment Framework for Agriculture (AgriBEE) was launched in 2006 as a targeted initiative designed to eliminate race-based inequality and discrimination in the agricultural sector by providing opportunities for black South Africans to engage in agricultural activities along all levels of the sector's agricultural value chain. The Broad -Based Black Economic Empowerment (B-BBEE) which was much broader and deeper in scope and coverage than the original BEE provided a better basis for integrating the AgriBEE with other economic sectors to address the issue of race-based inequality. Operating as a point-based system where establishments in the private sector are allocated points based on five key pillars (i.e., proportion of Blacks in ownership, management control, company's contribution to skills development, enterprise development, and socio-economic development), the B-BBEE policy only allowed establishment with above a certain score threshold based on the point allocation within each pillar, to do business with the government (South African Government, 2004). This was to serve as an incentive for the private sector to contribute to skills development, local economic development, corporate social responsibility and increased inclusion of blacks not just in basic economic activities, but also in high-ranking corporate and leadership positions. Taken together, South Africa's (B-BBEE) policies and competition laws have aimed to target economic redress and inclusion of historically disadvantaged people in the ownership and control of economic activity and productive assets. The government has attempted to balance the interests of white owned businesses, labour and black entrants in the economy— a challenging task, with multiple trade-offs that perhaps help to explain why outcomes have not satisfied all interests of actors across many sectors (B-BBEE Commission 2017, 2020).

These black empowerment programmes have, however, been constrained by their inability to address the pervasive problem of socio-economic inequality in South Africa. The impacts of these instruments have been limited and slow, especially in the agro-processing sector where a few companies dominate (Vilkazi and Ponte, 2020:4). Some of the reasons for the failure of the BEE/B-BBEE include the lack of compliance on the part of the private sector, and failure to regulate the policy on the part of the state, and corruption. In particular, the fact that the regulatory body for ensuring policy compliance on the part of the private sector and state was only established in 2013–almost a decade after the initial BEE policy was enacted - is a testimony to the non-prioritisation of regulation on the part of the state. Also, the failure of the BEE/B-BBEE policy can be attributed to the focus of the policy on black economic participation on existing corporate and commercial outfits, without a commensurate focus on opportunities in the rural economy, especially agriculture and agro-industrialisation, and technical skills upgrading.

This lack of targeted policy to develop not only the economically relevant skills of marginalised groups, but also development of parallel economic niche areas, in the booming entrepreneurial/SME driven sector has been among the challenges for employment creation and skills development of the majority non-

37 A prominent example is the Black Economic Empowerment (BEE) programme launched in 2003 which was followed by an enhanced version, the Broad-Based Black Economic Empowerment (B-BBEE), in 2007.

white population (Mashele, 2018; Saba, 2018). The B-BBEE has not transformed the inherited structures of the economy – it has 'coloured' its features: following the principle of 'getting the economy right first' so as to not weaken competitiveness in export markets nor challenge the established oligopolies of South African industry (Vilakazi and Ponte, 2020: 15). This is particularly visible in the agro-processing and fisheries sectors where transformation and inclusion of marginalised groups has been driven mostly at the primary production level, and not at higher levels of value-addition (processing, packaging, and retail).

Agricultural development in post-Apartheid era: Towards a Policy for Inclusive Growth

Agriculture was destined to play a key role in the government's strategy to address poverty, inequality and uneven development after 1994. The 1995 White Paper on Agriculture and the 2001 Strategic Plan for South African Agriculture laid out the main policy objectives of agriculture in the context of national development planning, with focus on the Growth, Employment and Redistribution (GEAR) initiative which aimed to achieve reduction in inequality, international competitiveness in agriculture, and sustainable natural resource management (Department of Agriculture Forestry & Fisheries, 2014; OECD, 2006). The National Development Plan (NDP) 2012-2030, which is the current comprehensive government development agenda for the country, identifies agriculture as primarily an economic activity in rural areas with the potential to create one million paid jobs by 2030 that could impact strongly on poverty reduction. The NDP proposes several approaches to land reform and calls for greater investment in the agricultural and agro-processing and in small, medium and micro agribusinesses to create jobs and redress skewed ownership patterns. In line with GEAR and consistent with the agricultural sector objectives of the NDP, two initiatives have been launched by government to support inclusive growth and sustainable development in the sector. These are the Spatial Development Initiative (SDI) and the Industrial Development Zone (IDZ), both geared towards addressing poverty and uneven spatial development, and promoting balanced and sustainable development, especially among previously marginalised segments and zones.

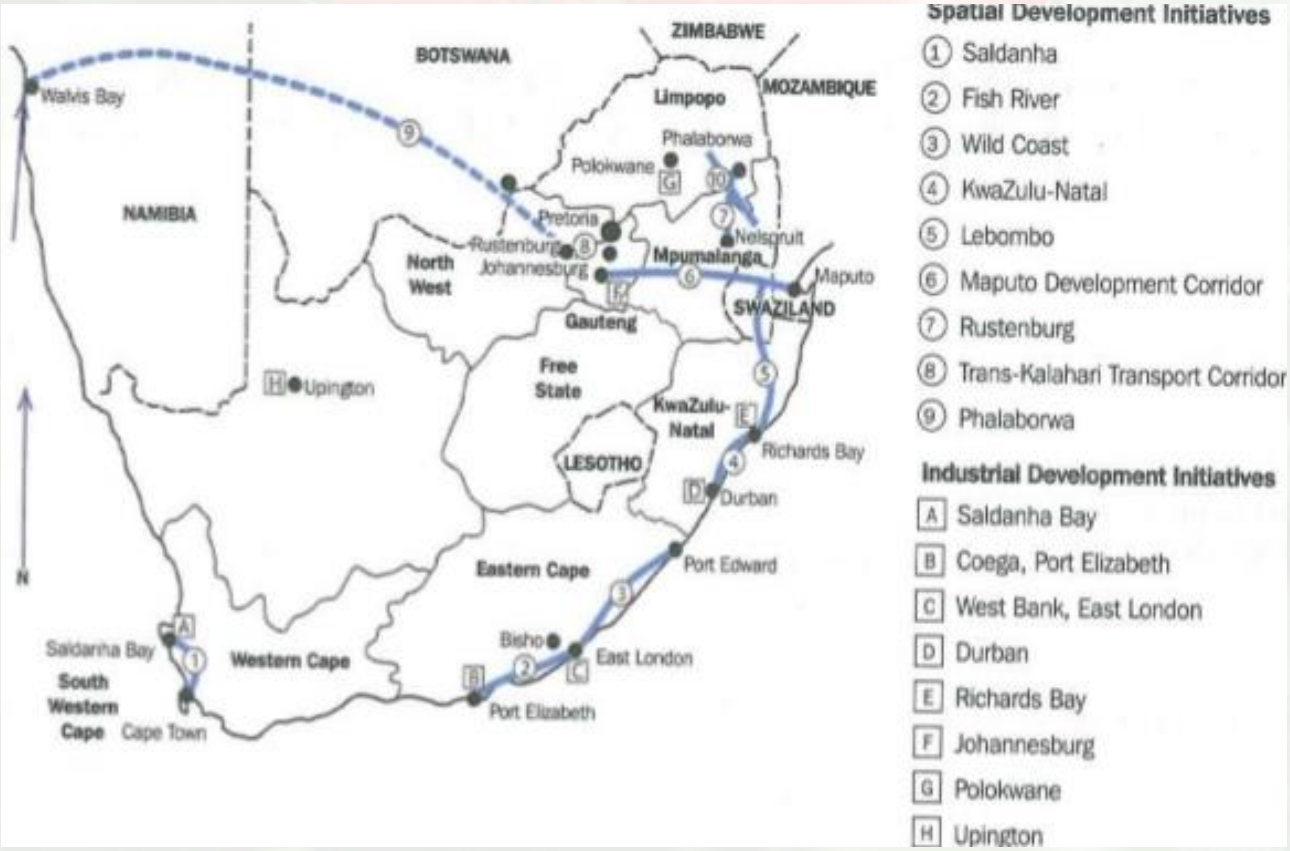
The SDI Programme

This programme was established in 1995 and focused on targeted geographical areas characterised by underutilised productive capacity but with economic growth potential, which if fulfilled could result in improvement in standards of living and sustainable employment creation (Jourdan, 1998). The programme was based on a public-private partnership model involving the national government, private sector, and local communities, with the state providing infrastructural incentives and enabling conditions for attracting private sector investment to targeted localities. Similarly, Industrial Development Zones (IDZs) initially an offshoot of the SDI were commissioned in 1997 as a strategy for narrowing the focus of the SDI to specific areas to be dedicated to agro-industrial production for export (see Figure 1) (Kleynhans et al., 2003; Simon, 2017).

Given the advanced state of agriculture including agro-industrialisation in South Africa, as well as the country's competitive advantage in the global tourism industry, fifty per cent (4 of 8) of its SDI zones were agro-tourism related, with the objective of promoting employment, local economic development, and addressing issues of unequal income and wealth distribution. Specifically,

the SDI identified the agricultural sector as providing the most cost-effective avenue for the economic uplifting of the marginalised poorer segments of the population through access to productive and remunerative employment opportunities. Nearly 800 projects were identified for implementation under the initiative, which were estimated to create 86,000 jobs. About a fifth of the SDI projects were linked to agriculture and agro-processing activities, the second largest group after tourism. (Naude and Mccoskey, 2000).

Figure 4: SDI and IDZ areas in South Africa.



Source: (Lanser, 2013)

However, the performance and impact of the of the SDI programme with respect to inclusion in agriculture and agribusiness has not been impressive. The percentage of South African households involved in agriculture-related production activities was recorded 14.8%, and only about 10 per cent of these cultivated farmlands while the majority were involved in subsistence backyard gardening. (Elias Tibane, 2019). Furthermore, the South Africa agricultural sector still retains its apartheid-era characteristic of being primarily dominated by white commercial farmers, while the rest of the population are still primarily excluded from the sector as owners of farms and agribusinesses. Although the Land Redistribution for Agricultural Development (LRAD) programme set up in 2000 was intended to provide black South Africans with financial assistance for access to arable lands specifically for agricultural purposes, not much seems to have changed. Whites, which make up 7.9% of the total population, own 72% of all registered farms and agricultural holdings in South Africa, compared to just 4% by blacks who account for over 80 per cent of the country's population[38]. A key reason cited for the continued exclusion of previously marginalised

38 Registered agricultural holdings ownership for the rest of the population is: 15% ownership by the Coloured populations, 5% by the

groups from the agricultural sector has been the issue of 'access to land'. The Land tenure and distribution system in the country is still disproportionally skewed in favour of whites, with the number of individual land ownership being 53% for the white population, compared to 22% for the black population (Department of Rural Development and Land Reform, 2017; OECD, 2006; StatsSA, 2019a, 2019b).

Actors and Drivers: Regulatory Environment and Institutional Framework

The key institutions responsible for agriculture and agribusiness are the Department of Agriculture, Land Reform and Rural Development (DALRRD), the Department of Environment, Forestry and Fisheries (DEFF), with a lesser role attributed to the Department of Trade and Industry (DTI). Other agricultural institutions involved in providing support, products and services include Agri South Africa (Agri SA), the Agricultural Business Chamber (ABC), the Agricultural Research Council (ARC), the Transvaal Agricultural Union South Africa (TAU SA), the National Agricultural Marketing Council (NAMC), the National African Farmers' Union of South Africa (NAFU), and the African Farmers' Association of South Africa (AFASA). On the finance front, credit and financial resources are provided by institutions in both the public and private sector. In the public sector, these institutions include the Land and Agricultural Bank (Land Bank), Development Bank of South Africa (DBSA), the Micro-Agricultural Financial Institutions of South Africa, and the AgriBEE Fund. In the private sector, institutions include banks, agricultural co-operatives, agribusinesses, and private creditors (Elias Tibane, 2019; OECD, 2006).

The administrative structure for agriculture and rural development in South Africa is built around the concept of developmental local government, such that power for policy formulation, monitoring and regulatory framework, budgeting and budgetary allocations, and the design of the institutional frameworks is vested at the national departmental level of government. The provincial governments are typically responsible for adapting the national strategy to the provincial context, setting their own operational targets and implementation plan, and providing extension services (e.g., training and marketing) to local farmers with the main focus being small-scale farmers; while the government at the local level were to manage, design and implement their own Integrated Development Plans (IDPs), Land Development Objectives (LDOs) and Local Economic Development Plans (LEDs) for their individual localities, in line with the Provincial Growth and Development Strategies (PGDSs) and Medium-Term Strategic Framework (MTSF) passed down from the provincial and national governments, respectively. Specific programmes, initiatives and schemes have been set up to provide support to the sector. These include: the Comprehensive Agricultural Support Programme (CASP) - a conditional grant transfer programme from the national government to the provinces to supplement the provinces' budgetary allocation for on-farm and communal land infrastructure; the Land Bank's commercial lending activities to agricultural cooperatives, private farmers, agribusinesses; and the Micro-Agricultural Finance Schemes for South Africa established in 2005 to provide micro-credit to small-scale farmers and accessible, affordable, and sustainable agricultural financial services (Ministry for Agriculture and Land Affairs, 1998; OECD, 2006).

With the country's limited water availability, especially for agriculture where less than 11% of the total land area in South Africa is suitable for rain-fed agriculture due to the climate-soil combination (Goldblatt, 2010; World Bank, 2020), the National Water Act (Act No. 36 of 1998) was enacted to regulate water use through compulsory licensing, and promote intensified provision of water to small-scale farmers and previously disadvantaged households. This Act was particularly relevant to the agricultural industry as it only authorised the usage of water resources on or adjacent to a landed property (Pienaar and Van Der Schyff, 2007).

A central objective of these regulatory and institutional frameworks is to address the issue of high levels of inequality in the South African economy by empowering individuals and households in the lower part of the income distribution. South Africa's competition law framework is widely considered to be progressive, as it includes broader public interest objectives, such as empowering small enterprises and inclusion of historically disadvantaged South Africans to participate in the economy (Vilakazi and Ponte, 2020). To do this, the institutional frameworks and legal structures put in place in the post-apartheid era, including in the agriculture and rural development space, have targeted poverty in rural areas and among minority groups via, not only, basic income provision (through social grants) and infrastructure supply (RDP housing and amenities basic provision), but also through economic empowerment initiatives for inclusive growth and development and an extensive network of funding and training facilities provided for business start-ups.

However, challenges of economic concentration persist despite the efforts of a competition regulator; this is related to the complex ways in which barriers to entry can be raised, and how market power is entrenched and reinforced by the dominance of large

Indian population.

incumbent agro-industrial firms (Vilakazi and Ponte, 2020:7). The South African government's institutional power is limited by a policy gap in terms of the scope of the B-BBEE Act and the Competition Act to address systemic structural barriers to participation and asymmetries in power (Vilakazi and Ponte, 2020:36).[39] Within these existing frameworks and structures, SAPZ type models should in principle have a buoyant base for successful implementation but implementation might require firmer and a more structured monitoring framework to avoid pitfalls that have plagued similar initiatives in South Africa.

Example 1: 4.3.7 The COEGA Industrial Development Zone (C-IDZ)

The COEGA IDZ (C-IDZ) has been lauded at the most successful SEZ implementation on the African continent. Located in the Nelson Mandela Bay Metropolitan Municipality, it sits on 11,500 hectares of land in the Eastern Cape province of South Africa, close to Port Elizabeth. It is one of two Industrial Development Zones (IDZs)[40] in the Eastern Cape and is part of the South African Spatial Development Initiative (SDI). C-IDZ's primary spatial advantage is the inclusion of the transhipment Port of Ngquara in the SEZ, as well as its proximity to the Port Elizabeth International Airport, both of which facilitate its objective of export-oriented manufacturing. The C-IDZ has 14 key industrial sectors, categorised as industrial zones, namely Metals/Metallurgical, Automotive, Business Process Outsourcing (BPO), Chemicals, Agro-processing, Logistics, Trade solutions, Energy, Maritime.

However, since its inception, more activities and investment has been recorded in other sectors (like automotive and energy), than in the agro-processing sector. Given the Eastern Cape's rich agricultural endowment and history, a key consideration in the location of an IDZ in the region is that it would stimulate agro-processing investments and promote export from the agricultural sector in the region. This does not seem to have happened, as the agro-processing component of the zone is seemingly slow to take off, with the first major investment being made in 2014 and a more recent one approved for 2020. This is in comparison to 42 non-agricultural investors operating in in the zone with an estimated investment of 7 billion Rands.

The administration and funding model adopted is unique in that while it operates as a public entity that is wholly owned by the Eastern Cape Provincial government which also provides the basic infrastructure of the IDZ, and development of the Zone is based on its ability to attract investment for the various projects to be implemented within the Zone. For example, the infrastructure for the Aquaculture precinct of the Zone will be primarily funded by the investors, while the state eases the constraints to doing business (like obtaining an Environmental Impact Assessment Report for the project, which typically take up to two years for investors to obtain, entirely at its own cost), and extends the existing fiscal incentives to the investors (COEGA, 2020a). Although the Zone is wholly owned by the provincial government through a corporation (the Coega Development Corporation), it operates as an independent entity with its own Executive Management Committee which is the highest decision-making body for the corporation (COEGA, 2020b). This administrative leadership is responsible for sourcing for investors, subject to the existing regulation in the country.

Since its inception, the C-IDZ has won numerous awards for employment generation, and support for local economic development. It has also partnered with the Provincial government in the implementation of Reconstruction and Development Programme (RDP) housing and re-settlement plans. In terms of micro and small enterprise (MSE) development, COEGA has implemented various initiatives over the years to assist with capacity training and development, skills upgrading and local economic development. For example, in 2026/1, COEGA added 7,170 operational jobs and 9,330 construction jobs through activities within the zone, as well as new infrastructure projects created during the period. Its impact on local economic development over time encompassed significant contributions to skills upgrading and micro and small enterprises (MSEs) engagement:

> "5,886 people were trained and the SMME spend reached 36% during the financial year of 2016/17. 555 people are currently contracted on the projects in the IDZ, and 70% of them are Nelson Mandela Bay-based residents. IDZ investment projects and infrastructure development programmes created more than 83 405 jobs in the past eight years."(COEGA, 2020b).

However, within the Zone, most activities are dominated by medium and large businesses, with MSEs only playing side-roles in projects which come up from time-to time. Within the Industrial park, only

39 See Vilakzi and Ponte (2020) for a political economy perspective on the fisheries sector in South Africa. Regulatory intervention aimed at sector transformation has been mostly focused on the primary production fishing node compared to high value-added lies downstream fish processing, packaging and retail. The lack of financial and industrial policy support for entry into higher-value adding levels (processing, packaging and retail) needs to be redressed through quota allocation and competition regulation to include black-owned businesses as competitors in the hake value chain.

40 The second is the East London Industrial Development Zone (EL-IDZ) locate in Buffalo City in East London.

a handful small businesses are identified. The non-existence of an incubator within the Zone, despite the management's commitment do MSME development and training, also calls to question its actual dedication to the long-term development of MSEs and Entrepreneurial businesses. A reason for this might be the nature of the industries operating within the Zone. Energy, mining, etc, are generally considered large-scale type businesses whose characteristics necessitate that they maximise internal economies of scale if they are to be successful, such that small business operation in the space is not generally the norm.

The regulatory framework tends to discriminate against micro and small enterprises in those sectors, and accordingly does not encourage formation of smaller businesses in the sector. Should the state give preferential support to MSEs, this could shift the focus of policy from internal to external economies of scale which will help individual small businesses to benefit from agglomeration. In furtherance of the development of agro-processing within an IDZ cluster, it is necessary from the standpoint of inclusive growth that the sector is not dominated by large companies and MNCS. Admittedly, this will depend on the extent to which the state can intervene to influence the implementation process, and how much authority it has over how investment funds are allocated and directed.

Example 2: The Sundays River Valley Citrus Cluster: A (Failed) Experiment in Inclusion

The Sunday's River Valley Municipality (SRVM) located about 80km from Port Elizabeth, is situated in the Greater Addo area of the Sarah Bartman District. The municipality is home to a vibrant Citrus Cluster which contributes about 17% to the national output of citrus production in South Africa (Jansen, 2017). Despite having buoyant citrus and tourism sectors[41] which make up the main economic activities in the Valley, it is characterised by high levels of unemployment and poverty and inequality along racial lines. Citrus processing and packaging activities which are centred around main town of Kirkwood Citrus are owned and managed by the white farming communities in the Valley, while other economic activities which are mostly micro and small scale (primarily salons, taverns, construction and repair enterprises, vegetable farming and occasional catering and restaurant services) take place in the non-white residential communities (informal settlements and townships) on the fringes of the three main towns.

These non-white communities which account for the largest proportion of the municipality's population are politically demarcated into eight wards for administrative purposes. The primary source of income is social grant paid by the state and additionally from casual employment during the citrus picking season which benefits only a fraction of the local workforce as this type of work is now mechanised. In such circumstances, as to be expected, these marginalised communities in the area are characterised by high levels of poverty, high population density very poor level of infrastructural development (Pernegger and Godehart, 2007; Sundays River Valley Municipality (SRVM), 2016).

Although the citrus industry in the SRVM benefits from its proximity to Port Elizabeth, particularly with regards to product export via the Port of Ngquara, the role of the state in the Valley is restricted to the AENP, with minimal involvement in the agricultural sector beyond land and water regulation and occasional infrastructure. The limited state involvement in the area is evident in the disparity in development levels between Kirkwood and most of the other residential communities in the area. Most of the infrastructure and services, like local roads, connection to the municipal electricity grid, local medical facilities, sanitation and water infrastructure, in Kirkwood were provided by large commercial private sector farmers.

There are a few independent black farmers who also pack and distribute their own citrus products, the industry is overwhelmingly dominated by white private sector entrepreneurs. Production, processing, marketing and transportation is organised through a private holding company, the Sundays River Valley Citrus Company (SRCC), which is "the largest grower, packer and exporter of South African citrus". The presence of a thriving citrus cluster in the area has had minimal impact on the socio-economic conditions and well-being of the majority non-white population in the Valley. Most of workers on the farms (who serve as citrus harvesters) are migrants who only come to the area during the harvesting season, supplementing regular workers living within the commercial farms as full-time employees.

Performance Evaluation and Lessons Learnt

COEGA: Limited state involvement and monitoring

While the COEGA IDZ has made significant contributions to economic development via job creation and local economic development initiatives, the virtual exclusion of agricultural sector activities from the Zone is a missed opportunity for a more inclusive style of growth

41 Driven by the ANEP and smaller Game reserves in the area.

that could help to reduce rural poverty. Furthermore, the focus on impact of the investment on contribution to local economic development (LED) mainly in terms of number of jobs created seems to favour large-scale projects that require more labour inputs in the initial development phase, than smaller community-based businesses that originally generate fewer but better quality and sustainable jobs over time. Governments need to be more involved in investment negotiations and implementation decisions. The aim should be to attract a mix of investments in SEZs that crucially include MSE local businesses that provide services and supply inputs to medium and large enterprises in the zone. This model of larger businesses outsourcing some of their functions to local businesses fits in with the requirement of the SAPZ model to attract micro and small operators in agro-industrial agglomerations on longer-term sustainable basis.

Attention should be paid to reform of the funding model adopted for the IDZs, where infrastructural and fiscal incentives were provided by the national government to attract investors but implementation decentralised at the provincial and local levels; this allowed for zonal projects like COEGA to primarily operate as an independent entity, outside the regulatory framework of national authorities, including attracting and selecting investors for financial assistance and other benefits. The tendency is for Provincial and local governments to be less involved in the monitoring and regulation of initiatives like COEGA which has its own independent management board. While it makes sense to customise IDZ initiatives to suite the locality context, it nevertheless becomes difficult to apply national strategies and policies pertaining to inclusion and quality of employment to a variety of dispersed decentralised zonal programmes, especially where implementation responsibility is further devolved to independent management boards.

Hence, beyond the missed opportunity of active participation of the agricultural sector in COEGA, there is also room for improved institutional coordination among the different tiers of governmental authority from national through provincial to local. Lessons can be learned from the failure of the B-BBEE program, primarily due to the failure of the state to set up a formalised monitoring and regulatory framework for the programme early enough. In the implementation of SAPZs, the need for an effective monitoring and regulatory framework cannot be over-emphasised.

SRVM: Unsuccessful policies and missed opportunities

The experience from the SRVM citrus cluster suggests flaws in national government policies and programmes designed to bring the marginalised population groups into the agricultural ecosystem in their own localities. One such policy is the State's partnership with the private sector to provide mentorship and guidance to black farmers in the Valley, with the objective of promoting greater inclusion within the citrus industry and socio-economic benefits for the non-white population in the area. To do this, the Department of Rural Development and Land Reform purchased some farmlands from white owners and leased to a consortium of black- owned business concerns interested in farming. The land remains the property of the government, while management and administration is vested in the hands of established citrus farmers in a partnership with the State. These established businesses are responsible for the day to day management of the state-owned farms while mentoring the black farmers operating on those farms. Feedback from local black and some white farmers indicates that black farmers in such partnerships with the established private farming organisations operate

under serious constraints. For example, the greater proportion (over 70%) of the earnings of black farmers are returned to the mentors as payment for their services. Consequently, contrary to the initial objective of the partnership initiative, this programme has failed to attract black farmers to the agricultural sector as they consider it disadvantageous. A key reason for the failure of this policy is the 'hands-off' monitoring approach of the state, where control of the programme is mostly vested in the private sector. As a result, the private sector seems to have taken advantage of the programme to benefit themselves to the detriment of the marginalised groups they are supposed to assist through skills upgrading.

Another failed policy is the implementation of the water-use rights in the Valley. To give an edge to potential black farmers in the SRV, the state reserved a proportion of water-use rights for marginalised populations. This policy has, however, been appropriated by the white farmers who buy these rights from the members of marginalised communities for very long periods, thereby limiting the ability of these communities to operate effectively and competitively in the citrus industry. An important lesson from the failed state policies that characterise the SVR citrus cluster experience is the need for government to review and improve its monitoring and regulatory approach and capacity in the implementation of local economic development initiatives.

The experience of state intervention to promote inclusion in the SRV cluster reflects a myriad of missed opportunities to attain economic diversification through agro-industrialisation. The SRV has extensive unutilised arable land that is viable for livestock and dairy farming and staple crop production and processing. In addition to the state's initiative to incorporate black farmers in the citrus industry, the option of creating parallel agro-industry activities that benefit from enabling conditions associated with the established the citrus industry was not considered. A good case can be made for leveraging existing infrastructure, transport networks, marketing and exporting facilities to develop alternative farming activities, with minimal cost implications. Consequently, agricultural production, agro-industrial processing and related export-oriented agribusinesses in the SRV municipal area have not contributed to inclusive growth and reduction in rural poverty in any meaningful sense.

4.2.8 Case Study 8: Gabon – Tropical timber industry: Forward linking value-addition approaches to Industrialisation

Context and Activity

Background and evolution of the timber industry

In addition to its petroleum resources, Gabon is naturally endowed with a variety of valuable tropical timber from forests that make up over three-quarters of the country's land mass. With over 400 species of trees of which about 100 are marketable for industrial use, Gabon currently earns over $400 million annually from export of timber and is the largest exporter in Africa accounting for about 20 per cent of the continent's total export. Forestry was the primary source of economic activity and revenue in Gabon until the late 1960s when the industry was supplanted by crude oil as the major foreign exchange earner. Oil

dominated the economy and was contributing almost 90 per cent to GDP and accounting for about 80 per cent of export earnings on average annually between 1990 and 2010. There was concern by government about the country's heavy dependency on oil, which led to the adoption of a plan for economic diversification, Plan Strategique Gabon Emergent (PSGE), that aimed at transforming other sectors of the economy including agriculture where the focus was on the forest industry (AfDB, 2018; Aki, 2019). Although commercial exploitation of timber in Gabon began as early as the 1890s, the industry at the time the PSGE was launched in 2010 was struggling to realise its potential due to poor utilisation of forest resource, lack of international competitiveness, and limited access to global markets. Consequently, the industry was having very little impact on Gabon's development.

Historically, the extraction and exportation of timber in Gabon was dominated by French-owned companies which established forward-linking processing sub-sectors for sawn wood, veneer sheet and plywood in response to the rising demand for wood products in Europe. After independence in 1960 and more recently, investors from Asian countries, such as China, Malaysia, India, and local Gabonese enterprises have appeared on the scene. Although the Government of Gabon (GoG) had introduced a new legislative framework, the Forest Industry Code for the timber industry as far back as 2001, which led to a noticeable increase in the production and export of wood product, the state had played a minor role in the formal regulation of the industry until quite recently (OBG, 2016).

In the past, more attention had been given by government to the higher rent-earning oil industry, but with instability in the price and demand for oil attention is shifting to promoting forestry a significant economic sector. For example, emphasis is given to reforestation and forest management for environmental sustainability and to opening up and developing the least accessible areas for expansion of the timber industry through improved transport infrastructure (i.e. the Trans-Gabon Railway and Ndjole-Bitam highway). The GoG is also showing awareness of the need to support the industry, through an industrial policy that helps to create a stable supportive business environment for investments in wood processing and products locally and enhances the dynamic capabilities of investors to target specific export markets. It is in this context that the Gabon Special Economic Zone (G-SEZ), the subject of this case-study, was conceived and launched in 2011 as an integrated wood products industrial processing zone.

AfDB perspective

The inclusion of an example the forest industry in a study on the SAPZ model is in line with recognition by the AfDB that the industry is an integral part of agricultural sector in Africa, with the potential to contribute to the Bank's High 5 development priorities and the green economy (African Natural Resources Centre, AfDB, 2018). Like other forms of value-addition processing within agriculture, the Bank believes that the potential of forestry as a development catalyst lies in awareness by policymakers of the importance of forest and wood product value chains in African development. It also acknowledges, similar to other types of agro-industrial production, that forestry value chains will require favourable policy environment and business climate, private investment, and facilitating access to requisite inputs and services for success (AfDB, 2020). The choice of the G-SEZ as a case study in this report is appropriate for illustrating the scope and possibility for applying the Bank's SAPZ model to industrial production within the forestry sub-sector of agriculture, and serves as a basis for contending that the industry offers opportunity for the realisation of economic, social and environmental development objectives as prescribed by the UN Sustainable Development Goals (SDGs), the AU Agenda 2063 and the AfDB High 5 development priorities.

The Gabon Special Economic Zone (G-SEZ), Nkok

G-SEZ is an integrated timber-based multiproduct SEZ located in Nkok, about 20 km from Gabon's capital, Libreville, and covers an area of 1126 hectares comprising of three zones – industrial, commercial and residential. It currently hosts dozens of factories engaged in plywood and veneer production and high value-added activities such as furniture making and ancillary industries and services. The zone was initially set up as a joint venture between the Government of Gabon (GoG), Olam International[42] and Africa Finance Corporation[43], with an initial an investment of about USD 400 million. G-SEZ is owned and managed as a Public-Private-Partnership (PPP) entity, and operates on the basis of the original vision of the GoG to promote sustainable production and processing of timber and wood products in line with Gabon's economic diversification programme and transition towards industrialisation. The aim is to maximise local value extracted from the wood sector and, thereby, contribute towards making Gabon a major player in the international wood product industry (Modern Woodwork, 2016). It is envisaged that the development of G-SEZ Nkok would strengthen the country's industrial base through value-addition to

42 Olam International is a major food and agribusiness company based in Singapore and operating in more than 60 countries and supplying food and industrial raw materials to nearly 20,000 customers worldwide.

43 Africa Finance Corporation, with headquarters in Lagos, is a pan-African multilateral development financial institution established in 2007 by sovereign African states to provide pragmatic solutions to Africa's infrastructural deficits.

timber, as well as facilitate the participation of local tenant farmers and SMEs as producers and suppliers for the forest industry (Terheggen, 2011). It is expected to also have a significant impact on the Gabonese economy in terms of export earnings, contribution to GDP and job creation – three key economic growth attributes which were estimated to increase between 3 and 4-fold respectively between 2010 and 2020 (ARISE IIP, 2020).

Actors – The Role of the State: A partner for establishing an integrated wood products industrial ecosystem with world class infrastructure

All forests in Gabon are owned by the state, and concessions for 20 to 25 years are offered by the government to logging companies to do sustainable logging. Before the launch of G-SEZ in 2010, Gabon was mainly exporting logs as raw timber, but the government banned the export of round logs raw timber immediately following the establishment of the zone. The Government of Gabon (GoG) has provided strong and committed leadership and demonstrable political will to develop and sustain the G-SEZ as a unique integrated wood products ecosystem as a spatial solution for addressing Gabon's quest for economic diversification industrialisation.

Over the past decade, GoG has worked collaboratively with private investors to build G-SEZ into a model agro-industrial processing zone that encompasses both upstream and downstream activities, from forestry plantation for log supply, to processing and manufacturing, and finally marketing and export activities. The GoG has used revenues from its petroleum exports towards the provision of purposely-built and installed hard and soft modern infrastructure to serve the zone, such as a dedicated 70 MW power generator and proposed connection a hydro-electric power plant; water and waste disposal system; 45 km metalled internal road network; connection to rail freight transportation, port and logistics facilities; high-speed fibre optic broadband internet competitivity; business incubation and skills training centres; and business support for the establishment of ancillary industries. G-SEZ Nkok enjoys excellent transport connectivity for receiving supplies and distributing and shipping finished products: the zone is situated on the main national highway network; alongside the Trans-Gabonese railway line with its own railway siding; and connected by an 18 km inland waterway to a 200-metre long berth on the quay in the new Owendo international port developed by G-SEZ.

Since its inception, the G-SEZ has attracted an estimated USD 1.7 billion worth of foreign direct investments (FDI) linked to over 150 investors from 18 countries. There are more than 60 foreign and local companies operating across the manufacturing and commercial clusters of the zone and another 30 factories and similar businesses are presently under construction or in the pipeline. Forest concessions covering about 12 million hectares have been granted by the government to about 60 firms that are engaged in the exploitation of Gabon's forests for raw timber. Incentives offered by government to investors in G-SEZ operations range from favourable fiscal concessions (0% income tax, 0% customs and excise duties, 0% VAT, etc.); no restrictions on repatriation of profits by investors; to ease-of-doing business inducements through one-stop shop solutions for approval and registration (17 government departments including customs clearance operate within a single cluster in the SEZ and quick and easy paperwork assured); and loan guarantees and easy access to tailor-made financing to SMEs including local producers/farmers for working capital, and reliable electricity and water supply at subsidized tariffs. The government also assures supply of quality wood to manufacturers and provide business support to help companies move up the value chain for manufacturing of quality 'Made in Gabon' brand furniture as a high value-added activity for the domestic market and export.

G-SEZ has over 60,000 square metres of ready-to-use sheds for rental as factory space at concessional rate to promote furniture manufacturing. Marketing and export promotion support is provided through access to a 9000 square metres of exhibition space within the zone for trade promotion, the establishment of G-SEZ shopping portals and stores locally and externally, and guaranteed sales from contract with government to manufacture all public sector furniture needs (e.g. offices, schools, hospitals, etc.). The combination of favourable investment climate, including quality infrastructure, and stable macroeconomic environment (adequate foreign exchange reserves from petroleum exports and local currency, the CFA is pegged to the Euro) has contributed to important benefits to the economy, in terms of: creating over 8,000 wage jobs directly and about 26,000 indirect jobs associated with G-SEZ operations, and the potential for creating an additional 10,000 jobs by 2025; opportunities for skills upgrading and entrepreneurship training within the zone; and the establishment of ancillary industries such as glue making, kiln drying, and transport and logistics including the participation of Gabonese companies. Output from G-SEZ activities now contribute about 14 per cent of Gabon's annual export earnings (ARISE IIP, 2019; AfDB, 2020).

Performance evaluation and lessons

This case study of the experience of G-SEZ shows that forestry has tremendous potential to contribute to economic transformation in African countries.

According to the FAO, Africa's forests are estimated to cover about one-quarter of the continent's total land area, and in the case of the central African region where Gabon is located this share goes up to almost 40 per cent – underlining the importance of forestry and forest-derived goods and services for the transformation of African agriculture. The case study can also be traced to a plan adopted by Gabon to reduce its dependency on petroleum by pursuing a programme of economic diversification, which specifically emphasized agriculture based on the country's vast forestry resources. Agro-industrialisation in the form of processing of the country's timber was identified as an appropriate transformational and growth strategy, highlighting importance of value-addition to primary commodities and value chains in the national development agenda.

The vision and crucial role of the state as an enabler in the establishment of G-SEZ demonstrates the importance of committed political leadership and support for SEZs as catalyst for economic diversification and structural transformation. Strong political willingness by the GoG to develop the G-SEZ in partnership with the private sector as a means to transform the economy and accelerate industrialisation has been complemented by the enactment of necessary laws and proper regulatory and institutional arrangements for governance of the forest industry in an environmentally sustainable manner. Reforestation has been continuously promoted, and positive steps taken prevent over-exploitation. A new law that came into force recently not only included provisions for reinforcing the overall approach of sustainable forest management, but also protects the interest of local communities that depend on the forest for their livelihoods through the institutionalisation of 'community forestry' co-existing with commercial logging. Prudent combination of investment and regulatory environments has contributed to the private sector becoming a major driver of industrial development and the export of wood products based on a sustainable forest industry.

From a political economy analysis standpoint, attractive fiscal and infrastructural incentives offered by the state to investors, made possible by the country's resource wealth from oil, have laid the foundation for the flow of tangible benefits to the economy and people of Gabon, such as employment generation, opportunities for skills upgrading and entrepreneurship training, technology transfer, private sector development including participation of Gabonese companies, and better economic and social conditions for the population. The impact on the Gabonese economy has been substantial and impressive. Since the establishment of G-SEZ, there has been a three-fold increase in the export value of wood products; a 400 per cent increase in the contribution of the forestry and wood sector to GDP; and a 400 per cent increase in wage employment in the sector (ARISE IIP, 2020; Modern Woodwork, 2019). These benefits could effectively assure inclusive growth and sustainable economic development in Gabon for the longer term. Indications are, that in the absence of unforeseen bottlenecks across the value chain and volatility in global markets, Gabon is on track to realise the great potential of its forestry industry largely due to the successful operation of G-SEZ.

It is obvious from the case study that the realisation of the potential of forest agro-industry to drive sustainable development in African countries depends on the governance of the industry, the way forests are managed, and the local value added through processing. Furthermore, the experience of G-SEZ shows that is necessary to build and sustain concrete linkages between forestry and other industrial sectors in the economy, such as construction, furniture, paper and packaging, construction, and textile manufacturing, to accelerate the industrialisation process and increase its development impact.

Notwithstanding the impressive performance of G-SEZ as an agro-industrial processing zone, challenges remain for the expansion of existing forward linkages and diversification of growth-enhancing and value-addition industrial activities and backward linkages with the rest of the economy, especially when one goes beyond the G-SEZ as an enclave entity and look at the Gabonese economy as a whole. These include shortages of local skilled workers; inadequate soft infrastructure (e.g. financial and banking services, computing services, research and development); the need to spread the potential benefits from industrialisation activities to smaller local businesses and provide sustainable revenue for smallholders and SMEs; increase in efficiency and competitiveness of state-owned monopolies in the transport sector and public utilities; and transparent and better management of extractive industry concessions, stemming from the risk of rent-seeking and corrupt behaviour by the political elite and bureaucrats, as documented in the literature on corruption and the resource curse (Krueger, 1974; Campos et al, 1999; Lambsdorff, 2002; Collier and Hoeffler, 2005; Rosser, 2006; World Bank, 2006; UNECA-AUABC, 2016; Warf, 2017).

5

Findings, Lessons and Policy Implications

5.1 Findings and Summary

The different case studies have yielded lessons that highlight key policy and institutional factors which determine, or at least influence, outcomes and overall performance of the experiences surveyed. Broadly speaking, the findings from the case studies underline examples of 'good practice' as well as reveal reasons that may have contributed to 'poor performance'. The evaluation of the case studies in terms of performance is presented in a comparative table below that summarises the outcome of the different experiences, according to specific criteria linked to key policy and institutional factors. The findings from the different case studies are useful as the basis for evidence-based policy recommendations and guidelines pertinent to the design and programming of the SAPZ model.

The comparative summary table of performance provides benchmarks for 'success' stemming from specific experiences of the different case studies. The assessment is based on findings of the synthesized case studies, which can be extrapolated for wider applicability to policy recommendations and practical guidelines for the design, programming and implementation of the SAPZ model. The horizontal axis of the table below contains nine performance criteria that are identified from the case studies and lessons learned, as yardsticks for measuring (degrees of) success. These correspond to important requirements for the planning and execution of SEZs such as: good macroeconomic policy environment; political will, leadership and ownership at the highest level; appropriate legal and regulatory institutional frameworks; beneficial linkages with other sectors of the economy; transformative relationship with foreign investment and development partners; productive and remunerative employment creation and skills upgrading; spatial development solutions; contribution to economic diversification and overall structural transformation; and technology transfer and innovation.

Table A: Country performance criteria and success indicators for SAPZ model

	Case Studies Summary: Performance Criteria								
Country	**Macroeconomic policy environment (investment, trade, and industrial policies)**	**Political will, Leadership, and long-term commitment at the highest level**	**Legal & Regulatory Institutional Framework**	**Relationship with External Investment and Development Partners**	**Integration with the rest of the national economy**	**Productive & remunerative employment and skills upgrading**	**Spatial development and dispersed urbanisation**	**Value addition and economic structural transformation**	**Technology transfer, diffusion & Innovation**
Ethiopia I	V	V	Somewhat	V	V	Somewhat	V	V	Unclear
Ethiopia II	V	V	Somewhat	V	Somewhat	Somewhat	V	V	Unclear
Kenya	Somewhat	V	V	V	Somewhat	Somewhat	Unclear	V	Somewhat
Senegal	V	V	V	V	V	Somewhat	V	V	V
Morocco	V	V	V	V	Somewhat	V	V	V	Somewhat
Ghana	Somewhat	X	Unclear	V	Somewhat	X	Somewhat	X	X
South Africa	Unclear	Somewhat	Somewhat	Unclear	X	X	Unclear	Somewhat	Unclear
Gabon	V	V	V	V	Somewhat	Somewhat	Unclear	V	V

Note: V = successful; X = unsuccessful; somewhat = partial progress; unclear = insufficient information/ too early to indicate
Sources: Authors' elaboration

5.2: Lessons from Case Studies and Policy Implications

5.2.1 Government capacity and Governance

Perhaps the most important lesson from the case studies concerns the value of government capacity for driving agricultural transformation and agro-industrialisation. This relates, first and foremost, to the capacity of committed leadership and political will to own, champion and drive the process (i.e. planning and execution of an SEZ) at the highest level. Linked to this key requirement are governance issues that extend to quality of the bureaucracy in terms of competence, efficacy and morality. The capacity of government to successfully develop and execute SAPZ- type projects, especially in partnership with the private sector including foreign investors, will depend crucially on the existence and appropriateness of prevailing legal instruments and institutional arrangements for regulating SAPZ negotiations and implementation.

Leadership and political will at the highest level

The importance of leadership and political will for propelling agricultural transformation cannot be overstated, as these constitute drivers of performance criteria with respect to key policy issues and institutional factors that underline the application of the SAPZ model to development strategies at national and regional levels.

From the different case studies, this important multifaceted criterion which correspond to the vital role of the state is, perhaps, best exemplified by Ethiopia, where the overall responsibility for overseeing the Integrated Agro-Industrial Parks (IAIPs) is situated in the Office of the Prime Minister and supported by a high-level inter-ministerial task force that coordinates with the four regional industrial park development corporations to exchange on IAIP activities and progress updates. Gabon, where the government has also been able to use its resource allocation role to mobilise sizeable resource wealth from oil to team up with specialist multinational investors to establish a world class SEZ for value-added wood products from its forestry resources. Similarly, in the case of the Senegalese fisheries sector, the designation of overall responsibility and institutional coordination of activities in the sector to a separate and powerful Ministry of Fisheries and Maritime Economy, which is a senior cabinet entity with responsibility to sign cooperation agreements with foreign development and investment partners on behalf of the state, has been instrumental in the successful performance of the sector in terms of development impact.

Strong and long-term commitment from the top echelon of the political elites and 'champions' at the highest level of government, are needed for engaging with the private investors on beneficial terms and to ensure policy coherence with respect to provision of incentives including the ease of doing business and the delivery of various public goods and monitoring of outputs from investments made under these enabling incentives. As the case study examples of Senegal and Ethiopia, and to a lesser degree Kenya, show, it is important to establish proper coordination and cooperation mechanisms among different tiers of government and across different government ministries and agencies.

Stable macroeconomic policy environment

From a wider development planning perspective, the macroeconomic policy framework is the most important requirement for the structural transformation of the economy. It is the framework that influences outcomes of the development process with respect to important objectives such as inclusive growth, industrial development, trade and export promotion, spatial solutions, employment and income generation and poverty reduction. With specific reference to agricultural transformation through inter alia agro-industrialisation, as deduced from the case studies (e.g. Ethiopia, Gabon, Senegal, Kenya and South Africa), it is important for government to assume a major role to create an enabling policy environment within the macroeconomic framework for attracting private investments and providing conditions for complementing industrial and trade policy instruments that would yield transformative outcomes.

In terms of application of the SAPZ model to economic transformation in African countries, it is crucial that the right type of industrial policy and trade regime that is conducive to both value-addition investment and export promotion is in place as part of macroeconomic framework. An effective industrial policy can contribute towards exploiting forward, backward and horizontal linkages between economic sectors; influence decisions about incentives and benefits, skills upgrading, allocation of resources, choice of technology and knowledge transfer; and promote agglomeration and spatial solutions that reduce rural-urban migration pressures and contribute to a dispersed pattern of urbanisation. The case studies from Gabon, Ethiopia, Senegal and Kenya are good examples of the positive influence of industrial policy on the processes of agricultural transformation and industrialisation. It can be noted that appropriate industrial policies were vital to the economic transformation of East Asia's developmental states. On the contrary, the examples from the case studies of Ghana and to some extent South Africa suggest that even with embedded comparative advantages, more attention should be paid to macroeconomic including industrial policy to take advantage of potential benefits

from agglomeration economies including the pace of industrialisation and inclusive growth.

As regards trade policy in the context of agricultural transformation, this can play a crucial role in reducing the need for foreign exchange associated with imported food as the experiences of Ethiopia and Kenya show, and in some cases, provide a large scope for foreign exchange earnings from agricultural exports as illustrated by the Senegalese, Kenyan, Ethiopian (and South African) case studies. Trade policies can also influence potential for capitalising on regional and global opportunities for economic diversification, based on new high value agricultural and horticultural products (fresh flowers and tropical fruits) as illustrated by the examples of Kenya, Ethiopia, and to a lesser degree Ghana, in addition to the special situation of South Africa. Export promotion through trade policies need to take cognizance of trade and investment facilitation measures that improve access to credit and direct business support by the state for local entrepreneurs, as in the case of the Gabon SEZ Nkok. Attention should also be paid in trade policy to management of exchange rate for domestic and international competitiveness of agricultural products and agro-industrialisation strategies.

Finally, the macroeconomic policy framework for supporting agricultural transformation must be aligned with the "big picture" that pertains to problems or issues of population growth and demographic transition, rapid urbanisation, digitalisation, post-COVID 19 economic recovery and possible reconfiguration of global supply chains, etc., and show how these will affect prospects for boosting agro-industrialisation and agribusiness export-led industrialisation.

5.2.2 Engaging the Private Sector

The operation of the SAPZ model as defined and conceptualised by the AfDB is expected to be a state enabled and private sector-led and managed initiative. This implies that government as owner and enabler of the process must adopt workable arrangements for engaging the private sector as a partner in the development and implementation of SAPZ project, which involve an array of important issues relating broadly to incentives and benefits, as illustrated in the political economy theoretical framework underlying this study. The Gabon case study of the Nkok SEZ is an excellent illustration of this arrangement, albeit that it has been facilitated by the country's resource wealth from oil.

Relationship with the private sector requires adequate knowledge and understanding on the part of government and its agencies of negotiation strategies, global markets, supply and value chains and related financing and marketing provisions, and international standards and requirements for export markets. Promoting an enabling environment to attract the private sector is linked with incentives made available to prospective investors. The Moroccan Agricultural Development fund is a good example of how a wide range of investment support and incentives have been made readily available and accessible to actors in the private sector that are specifically linked to aggregation and value-chain development activities that are aligned with the ambitions of the Green Morocco Plan.

Governments must avoid competing with the private sector, and do everything possible to make infrastructure and market conditions conducive to the needs of the private sector for a fair relationship in which both parties benefit from the standpoint of their respective interests as outlined in the study. As already observed, engaging with the private sector for investment in SEZs is likely to bring into focus on certain risk factors on the side of both parties. Arrangements must be put in place for the mitigation of these risks if they do occur. It is in this regard that the legal and regulatory institutional framework becomes a vital consideration in the design, programming and implementation of the SAPZ model.

5.2.3 Setting up proper Legal and Regulatory Institutional Framework

Legal and regulatory requirements in relation to SAPZ-type models underline the important institutional framework for negotiating and monitoring contractual agreements and supervising production and marketing activities of investors. A predictable and transparent legal and regulatory framework is required to define roles and responsibilities of the various parties concerned and provide protection and certainty to investors. The role of government as designer and purveyor of the legal and regulatory framework goes beyond the ability to attract and retain capital investment through legal guaranty of rights and flexibility that facilitates the ease of doing business. This role should crucially include requirements to ensure compliance by private sector developers and investors with good governance and to implement investment agreements in a manner that is pro-sustainable development. In this regard, host countries need to be careful not to sign investment agreements that circumscribe their ability and right to adjust tax regulations or renegotiate contracts if fundamental changes occur in the global economic situation and markets. Some SSA countries have been negatively affected by contractual rigidities with respect to bulk export of mineral and other natural resources.

As depicted by examples from the case studies, the Gabonese, Kenyan and Senegalese governments have in place legal and regulatory frameworks that minimise unpredictable risks, such as unfavourable

political development, delayed private sector investments, land speculation after delineation of zone and environmental challenges, while the Moroccan government has taken an active role in reforming its laws surrounding aggregation to implement national development priorities that promote investments in value-addition, agri-food processing and market diversification.

The regulatory framework should also include measures to prevent exploitation of small (local) by large (foreign) entrepreneurs in transactional relationships as might occur within SAPZ type operations. The case study of the Senegalese fisheries sector indicated awareness by the authorities of this threat, and the Ministry of Fisheries and Maritime Economy has considered measures to coordinate relationship between large foreign processors, wholesalers and small-scale local fisher input suppliers. Product standards and regulation of food safety and traceability is vital for export diversification to international and regional markets with stringent entry conditions. The Senegalese Ministry plays a direct role in facilitating international certification for local Senegalese processors to enable them to compete in the export markets with larger foreign-owned businesses in the sector. In the case of Kenya, similar to the Senegalese co-management model in the fisheries sector, the state has reasserted itself within a regulatory sphere that favours a more co-produced framework that emphasises public-private cooperation, sector-wide standards and funding for R&D for agro-industries. This is best displayed through the recently revised Kenyan regulations on horticultural crops (2019) where the Horticultural Crops Directorate is working on a national food safety and traceability mechanism that enables the FFV sector to reduce the number of inceptions by the EU. In Ethiopia, while the QSAE at the state level needs to strengthen its institutional capacity to reliably establish standards and monitor compliance on food safety, at the firm level, private sector actors have taken to quality standards more easily as a result of joint-venture initiatives between Ethiopians and Dutch investors inside the Yirgalem IAIP and successfully operate within a quality management systems framework that upholds international food safety certifications.

Regulation should also be aimed at provision of decent working conditions and satisfactory labour standards by (foreign) employers. The relative neglect of agriculture in the national development agenda of Ghana has somehow deprived local small agro-processors of official assistance and support derived from better institutional coordination that could enhance competitiveness for accessing export markets. The Gabonese case study illustrates the importance of the provision of quality infrastructure by the state as a critical regulatory institutional factor. Inadequate regulation in the case of the agro-processing industry in Ghana may have also contributed to labour unrests linked to wages and bonuses, which crippled production in one of the large commercial fruit plantations producing for export in 2019. In both Ethiopian cases, labour turnover has been high due to rising inflation of wage goods and low wage remuneration. The growth of the agro-industrial sector has acted as a catalyst for labour union mobilisation and subsequent training of farm unions in collective bargaining techniques under the new Labour Proclamation. In contrast, the regulatory framework for the G-SEZ in Gabon to some degree has embraced principles of social returns aimed at workers, residents and local communities as beneficiaries, carrying out direct consultation with these stakeholders as part of the process of agricultural transformation.

5.2.4 Establishing transformative and innovative development partnerships

One can argue that, in general, international development partnerships in the context of the planning and implementation of SAPZ type projects should be innovative and transformative – in the sense of supporting pro-sustainable development. Partners must support a pro-development agenda, for example, in relation to a global trade regime that is not protectionist and anti-value addition. International development partnership agreements, while seeking to attract new donors and sources of technical assistance, must similarly be pro-development in the sense of subscribing to fairer global development model that, for example, addresses concerns about tax avoidance by multinationals that result in revenue loss for host governments in developing countries, as well as amenable to the notion of transfer of technology and knowledge to the host country.

From the findings of the case studies, Ethiopia and Senegal seem to have succeeded to some extent in engaging pro-development investment and development partners in their agro-industrial processing subsectors. In the specific context of this report, the aim is to cultivate international development partners who believe in making agricultural transformation and value-added agro-industrialisation in Africa perform some of the essential roles that manufacturing export-led development did for East Asia. However, in conclusion, it is the singular responsibility of the partner government to define its own development agenda for structural transformation and establish parameters within which external partners can provide support.

5.2.5 Supporting regional and global value chain initiatives

The case studies in their respective context and dimension demonstrate that in an increasingly

inter-connected world, the way in which African economies and the region as a whole is integrated into the global economy can be decisive to outcomes of agro-industrialisation efforts. For example, the global economy is undergoing dynamic digital transformation with impacts felt in Africa; digital capabilities of African countries will be driven by industrial, investment and trade policy objectives which also have a bearing on agro-industrialisation as a transformation and development strategy. It is therefore important that African countries take steps to expand ICT and internet connectivity in all sectors of their economies to benefit from digitalisation in their integration in the global economy. This comes out clearly from the experiences of the Gabon SEZ, the horticultural sector in both Ethiopia and Kenya, and fisheries in Senegal with respect to organisational structures pertaining to global supply and value chains, market information and strategy, and business platform models relating to investment capital from external sources.

Trade facilitation policy will also influence the way African countries connect with the global economy. A more outward looking trade policy can improve access to essential needs and markets for promoting agro-industrialisation as implied in the SAPZ model. With the AfCFTA in mind, it may be necessary however to decide on whether to prioritise regional over global value chains as a continental strategy for economic development and industrialisation. It is possible that a focus on the 'regional' rather than the 'global' could better serve Ghana's nascent chocolate producing industry in the future. The same applies to processed food products from other countries reviewed such as Kenya and Senegal, from the standpoint of an urgent need to increase African participation in regional value chains to support structural change and economic diversification. This does not imply detachment from global value chains, as the pursuit of agro-industrialisation under the AfCFTA could well serve as a basis for improving international competitiveness and, hence, a more advantageous integration with the global economy.

5.2.6 Technology transfer and innovation

The advent and growing impact of digitalisation in Africa over the past decade should be acknowledged as a driver of agricultural transformation in the region with implications for value-added agro-industrial processing and marketing. In a digital world, assuring standards will be more integral to entry into regional and global value chains and for enhancing domestic and international competitiveness in areas such food production, fish processing, fresh flowers, and furniture making within the agricultural sector. Domestic agro-industrial policy may prioritise the multi-shoring or re-shoring of previously outsourced value chains in the case studies focused on: fresh fruit and vegetables in Kenya or cut-flower production in Ethiopia, given heightened concerns with quality control in global markets and changing consumer demands amidst economic downturn in advanced economies. This also applies to varying degrees to the fisheries sector in Senegal and wood products from the Nkok SEZ in Gabon.

However, this may be an opportunity for future agro-industrial activities across the continent to generate a more skilled class of workers with ICT skills to implement a digital traceability standards framework and other online numeral models. Adoption and diffusion of new technology and innovation come into play in agribusiness and agro-industrial processing to remain effective and competitive. In the case of Morocco, the Meknes and Berkane Agropoles have each successfully integrated both a Qualipolis for R&D facilities to ensuring quality and food standards harmonisation across the units; and a Zoopolis for skills promotion and certified professional agro-industrial training in technologically advanced subsectors such as bio-inputs. Use of ICT based tracking systems in tractor hiring services is gaining ground in private sector tractor hiring services. ICT is becoming important in agricultural extension services and market information in an era of the mobile phone technology and in mapping land resources and pest loads with drone technology. It is believed that the decline of a major pineapple growing and exporting business in Ghana, as presented in the case study, can be traced to failure to introduce new varieties of the crop that had dominated the export market. Similarly, small-scale local food-processors across the region have been unable or slow to upgrade and improve the quality of their machines which has left them at a disadvantage to cope with new demands and seize new market opportunities.

5.2.7 Value addition and economic diversification

A clear strategy for the design and programming of the SAPZ model, as already argued throughout this study, is to adopt national and regional development policies that are intended to promote value addition to agricultural production for both export and domestic markets. As numerous examples from the case studies show, policies should be formulated to complement and support comparative advantages and long-term sustainability. To be a catalyst for structural transformation in agriculture and the overall economy, value-addition strategies and policies need to be embedded in the domestic economy in terms of input supplies including labour and industrial inputs from the domestic manufacturing sector, focused on developing and strengthening linkages between various sectors of the economy. As a broad development strategy, value addition in agriculture should also be a mechanism for achieving economic diversification that can be instrumental for inclusive growth and rural poverty on a long-term basis.

All the case studies were in fact construed to highlight the importance of value addition for national development mainly through agro-processing and agribusiness. Successful examples from the experiences of Gabon, Senegal, Ethiopia, Morocco and Kenya, and from a different perspective the special case of South Africa, show that zone or

cluster development and operation can enhance value addition through advantages provided by economies of scale associated with agglomeration – focusing on basic infrastructure, such as transport network, power and water, and a conducive business environment, such as the intra-branch professional associations — 'Interprofessions', that organise private operators (producers, processors and exporters) inside the Moroccan agropoles. Where performance has not been too successful, as in the case of Ghana, the main challenges limiting value addition to agricultural production has been associated with the relative neglect of agriculture by the state and lack of political will, inability to respond to market conditions and opportunities, and regulatory vagueness – all of which limit realisation of the intrinsic potential of agro-processing in the country.

5.2.8 Skills upgrading and entrepreneurship training

Job creation from agro-processing in SSA countries is traditionally linked to non-farm employment in the agri-food system, mostly in self-employment in micro, small and medium enterprises based in homes and surrounding areas. This type of employment is linked to and grows with food demands and agricultural (farming and fisheries) output. Most of this type of employment is characterised by low productivity stemming from inefficient methods and appliances, limited skills and often insufficient incomes and is further constrained by poor infrastructure like energy and road. The different case studies illustrate to varying degrees the scope for SAPZ-type models to improve on this limited employment creation situation through investments in education and skills training, better equipment and technology, improved access to marketing and financial services, and other forms of institutional and business support from the state.

The example of the Nkok SEZ in Gabon demonstrates aptly the direct link between the establishment of a successful SEZ and the exploitation for opportunities for skills upgrading and entrepreneurship development locally. Thousands of semi-skilled and skilled jobs have been created within the zone and in ancillary industries. In the case of the fisheries sector in Senegal which meets most of the above-mentioned requirements, it is estimated that the sector accounts for about 600,000 jobs directly and indirectly, which is about 15 per cent of the nation's total workforce. Similarly, the horticultural sector (mostly fresh cut flowers for export) in both Kenya and Ethiopia have more recently been a significant source of additional wage employment in agriculture especially for women. It is also important to note that the IAIP model in Ethiopia as a spatial solution type initiative has had some success in stemming the trend in traditional rural-urban migration in search of non-existent decent jobs in big cities, by creating alternative productive and remunerative employment opportunities in and around rural agro-industrial growth poles such as Ziway.

Employment gains from commercial agriculture and agro-processing as observed from the Ghanaian and South African case studies have been less impressive, largely on account of constraints associated with deficits in political will and leadership commitment, policy and institutional management, poor regulation and supervision, and insufficient resource allocation and investment, etc. Labour market policy intervention is needed to ensure that this employment provision translates into a living wage capable of meeting the demands of the agro-industrial workforce in securing basic wage goods and a more diversified consumption basket over time.

Structural transformation in agriculture and rural areas which manifests itself not only in input and output markets, but also in the labour market is required to produce employment transformation and welfare gains. The case studies have shown that transformation can take the form of shifts in labour from low-productivity self-employment to productive wage employment both on and off-farm, including in micro, small and medium enterprises and large firms engaged in agro-processing. The sectors in which wage jobs are created in agriculture can also change over time with the introduction of new activities (e.g. horticulture- flowers and fresh fruits exports from Kenya and Ghana and avocado oil processing in Ethiopia) in response to market demand and supply chains transition internally and externally. It is important that current fast demographic transition in SSA is harnessed and directed at opportunities created by existing and evolving employment and supply and value chain transformations at national, regional and global levels. The SAPZ model as defined and conceptualised by the AfDB holds out much prospect in terms of its potential for large-scale job creation specifically tied to the transformation of the production structures in regional member countries.

5.2.9 Spatial development solution and dispersed urbanisation

The IAIP experience in Ethiopia, as the relevant case study shows, has gone a long way towards making the model serve as a vehicle for promoting the development of secondary or intermediary towns. The strategy behind this paradigm, as stated, is to advance to a more balanced and dispersed pattern of urbanisation by easing the rural-urban migration pressure off overcrowded and job-scarce primary urban centres such as the capital Addis Ababa. If successfully implemented, this strategy can confer a host of benefits on local populations and the rural

economy, including provision of labour-intensive employment opportunities, agro-industrial value addition production, and economies of scale for export diversification.

Private sector participation in spatial solutions via SAPZ type models should be encouraged through public-private-partnership (PPP) at decentralised levels of government, as was attempted in the South Africa IDZ and SDI models. However, as unfortunate experiences from these South African examples show – lack of institutional coordination, weak implementation capacity, poor governance and avoidance of reform, and misaligned incentives - it is necessary to ensure effective monitoring of implementation responsibilities, service provisions and benefit outcomes to attain desirable consequences.

6

Conclusion and Way Forward

6.1 Conclusion

This study has focused on the concept of Special Agro-Industrial Processing Zone (SAPZ) as the African Development Bank's (AfDB) brand for agro-based spatial development in the rural landscape of Africa. The SAPZ model, which stems from the Bank's 'Feed Africa Strategy' and is a follow-up on the Strategy's flagship 'Staple Crops Processing Zone' (SCPZ) programme, is being developed as an initiative designed to contribute to the achievement of the twin objectives of agricultural transformation and rural development through agro-industrialisation.

From a broad development perspective, the SAPZ model is grounded on an approach and policies that promote structural transformation through broadening participation in the development process and inclusive growth, with the involvement of the government as an enabler, the private sector as the implementing agent, and society as the beneficiary. The study has therefore critically examined the respective roles and interactions of these key actors in the SAPZ model from the perspective of policy and practice, and leaned towards the 'developmental state' strategy that is credited to have transformed East Asian economies in a manner that met transformational and societal needs.

The study has presented and appraised eight synthesized research case-studies drawn from existing spatial development agglomerations in contemporary Africa that encompass agro-processing, agri-food production, horticultural and fisheries activities. The lessons from the experiences of the different case studies are used to evaluate performance of each type according to a set of key 'success factors' that are related to requirements for the planning and implementation of the SAPZ model. These factors include: good macroeconomic policy environment; political will, leadership and ownership of the process at the highest level; suitable legal and regulatory institutional frameworks; beneficial linkages with other sectors of the economy; transformative and innovative relationship with foreign investment and development partners; innovative financing model; productive and remunerative employment creation and skills upgrading; spatial development solutions; contribution to economic diversification and structural transformation; and technology transfer, diffusion and innovation.

The findings from the different case-studies provided evidence-based indications and clues for policy guidance and practical guidelines, including drivers of success and common pitfalls to avoid, in design and programming of the SAPZ model by the AfDB. This is important as the Bank is currently interacting with several countries in the region, such as Ethiopia, Togo, Guinea, Mali, Senegal, Cote d'Ivoire, Nigeria, Mozambique, Madagascar, Zambia and South Africa, on various stages of SAPZ planning, and also in contact with others like Tanzania, Kenya, Uganda, Mauritius, Morocco and Egypt that have shown interest in the model.

The nature and scope of this study correspond to a 'knowledge product' aimed at the AfDB in its relationship with constituents and clients at the highest level of decision-makers in its Regional Member Countries (RMCs). It has, therefore, in addition to elaboration of methodological and key conceptual issues and supporting reference documentation and data sources, included critical analysis of desirable outcomes that draws on lessons of successful agro-industrial zones from the transformations of Asian, Latin American and European states as benchmarks for the SAPZ model. The adoption of a political economy theoretical framework, and the analysis of trade and industrial policies, and regional integration initiatives, have provided a basis for a better understanding of the effects of and why policy recommendations or changes (pertaining to both incentives and benefits) should be accepted or resisted in relation to desired outcomes.

Looking into the future, the study also highlighted and speculated on new and evolving opportunities for the development of SAPZs across Africa. These include the likely reconfiguration of regional and global supply and value chains in the context of a post-COVID 19 economic recovery, and the implementation of the African Continental Free Trade Area Agreement (AfCFTA) which should lead to a single continent- wide market for goods and services with free movement of capital and people.

6.2 Way Forward

In its interaction with its African constituents on the development and implementation of the SAPZ model,

it is important that the AfDB emphasise the economic and social development advantages of using the model as a most suitable mechanism for addressing pervasive development problems and challenges of high youth unemployment, widespread poverty especially in rural areas, inclusive growth and distorted patterns of rapid urbanisation. More specifically, highlighting the potential of the SAPZ model to achieve agricultural transformation and rural development implies awareness of dynamic economic, social and political changes and also technological developments that are taking place within African nations and the continent, as well as on the global stage. These trends will impact on ability to successfully plan and implement SAPZs across the continent.

Given that this is a relatively new concept as defined by the AfDB in the area of agro-industrial development, further research is required particularly on the implementation and impacts of a range of policies (e.g. industrial, trade, education and skills training, digitalisation, etc.) and the way policies may emerge as a coherent area of intervention for going forward. In addition, the legal and regulatory institutional frameworks for the planning and implementation of the SAPZ model, which are likely to be problematic as some of the case studies show, need to be investigated through empirical research for the purpose of identifying new and appropriate directions under different conditions as well as to meet challenges that may emerge. AfDB should be aware that special economic zones (SEZs) in Africa have generally been regarded as underperforming relative to their peers in the rest of the world (Stein, 2008; Farole 2011; Brautigam and Xiaoyang, 2011; Farole and Moberg, 2017). Therefore, in presenting the SAPZ model and its potential for success, the Bank should invest in concrete analysis of key features and what is lacking in the design of African SEZs – as this study has attempted in a limited context derived from the lessons of the synthesized case studies.

Specifically, in the context of feasibility studies undertaken by the AfDB, proper conceptualization of the SAPZ model in the broader development problems and challenges of particular geographical settings, including beyond national boundaries, will provide an opportunity to take into account critical factors in the design and programming of SAPZs. This approach would help ensure that dedicated policies, strategies, and institutions, which are crucial for improving chances of success, are not missed in assessing the viability of the SAPZ model as an operational programme at country and regional levels. In its dual role as both a developer and programmer of the SAPZ model, and noting its pivotal position in development financing in the continent, the AfDB is uniquely placed to influence key economic, organisational and spatial attributes that enhance efficiency and management practices in the planning and implementation of the model at the country land regional level.

As already outlined in chapter 2, which frames the concept of the SAPZ model within the institutional mandate and operational programmes of the Bank, there is a need to put in place policies, systems, institutions and business support for SMEs around strategic regional value chains within agriculture and other sectors. It also implies that the Bank should use the adoption of the SAPZ model as a flagship programme to justify consolidation of its specialised investment portfolios and financial facilities for harnessing infrastructural investments needed to support the operationalisation of the model at country and regional levels. In the same vein, the SAPZ model should be linked to AfDB-sponsored African Investment Forum as an opportunity to mobilise investment financing for implementing the model in national and regional development planning contexts. These are options within the sphere of the existing responsibility and programmes of the AfDB for realising the key policy and institutional factors and practical conditions required for making the SAPZ model operational as a transformational tool for achieving inclusive growth and sustainable rural development. Furthermore, support by the AfDB for SAPZ proposals should be based on sound economic and development justifications that would help governments to attract investors and unlock anticipated synergies and new opportunities. In contrast, the lack of proper feasibility studies is likely to result in sub-optimal decisions that are not likely to deliver expected results and benefits or ensure sustainability.

Looking into the future, the likely reconfiguration of regional and global supply and value chains in a post-Covid-19 economic recovery context could give a boost to the development and expansion of agribusiness in Africa and, thereby, create new opportunities for SAPZ-type programmes. Africa's potential in this field has already attracted substantial land-based foreign investments from European, Chinese, Saudi Arabian, South Korean and Indian companies that have invested hundreds of millions to lease large tracts of arable land for export-oriented commercial farming and agro-processing in countries such as Cameroon, Ethiopia, Kenya, the DRC, Madagascar, Mozambique and Senegal (Lisk, 2013).

Economic recovery in the post Covid-19 era, with emphasis on a green transformational agenda, will provide further opportunity for the continent to attract higher investment inflows destined for the agricultural sector and agribusiness. Also, the African Continental Free Trade Area (AFCFTA) – a single continent-wide market for goods and services, with free movement of capital and people – that has now entered into force provides a basis for African countries to adopt more inward-looking trade strategies in the post Covid-19 era. This development, in combination with favourable policy and institutional environments, could stimulate and enhance the value-addition agro-industrialisation agenda across the continent.

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ANNEX

Table 1: Listing of Agro-industrial Zones, Clusters, Parks in Africa

S/N	Country, Year [Agro activity]	Name of Zone	Location; Development/implementation model	Type of economic activity	Type of financing; Status
1	Angola, 2009 [Agro processing]	Luanda-Bengo Special Economic Zone (ZEELB)	Luanda; Exemption from payment of some custom and import duties; Infrastructure and services	SEZ -Special Economic Zone	Private Public Partnership; Operational
2	Benin, 2007 [Agro production] Note: No SEZs in area	Zone I. Area comprising Karimana, Malanville, and northern Kandi	Alibori District; Not applicable	Crop cultivation and animal husbandry practices	Not applicable
		Zone II. Area of Kerou, northeast Kouande in Atacora and Banikoara, Segbana, Gougounou, and southern Kandi	Alibori District; Not applicable	Crop cultivation	Not applicable
		Zone III. Area of Southern Borgou to Donga	Not applicable	Crop cultivation and animal husbandry practices	Not applicable
		Zone IV. Area of Ouake, Copargo, Boukoumbe, Tanguieta, Materi, Natitingou, Toukountouna, Kouande, Cobly, and West Djougou	Not applicable	Crop cultivation	Not applicable
		Zone V. Area of Atacora, Borgou, Mono, and Ouémé to Zou.	Not applicable	Crop cultivation	Not applicable
		Zone VI. Area of Plateau, Atlantique, Mono, Couffo, and Ouémé to Zou.	Not applicable	Crop cultivation and animal husbandry practices	Not applicable
		Zone VII. Area comprising Atlantique, Mono, Ouémé, and Zou.	Not applicable	Crop cultivation and animal husbandry practices	Not applicable
		Zone VIII. Area of Atlantique, Littoral, Mono, Ouémé	Not applicable	Crop cultivation	Not applicable

S/N	Country, Year [Agro activity]	Name of Zone	Location; Development/implementation model	Type of economic activity	Type of financing; Status
3	Cote d'Ivoire, 2018 [Agro, Processing]	Abidjan Industrial Park PK-24	Abidjan; Infrastructure and services	Processing of key commodities, including cocoa, cashew nuts, fruits and vegetables	Private Public Partnership
4	Democratic Republic of Congo, 2014 [Agro, Processing]	Bukanga Lonzo Agribusiness Park	South-East of Kinshasa Customs and Tax incentives	Agribusiness	Private Public Partnership
5	Djibouti, 2018 [Agro, Processing]	Djibouti International Free Trade Zone	Close to Djibouti's ports Exemption of property tax, corporate income tax, personal income tax for foreign employees, dividend tax as well as VAT. Also, Employers assume 10.2% social security and foreign workers are given work permits	Packaging production, light processing of incoming materials, food processing	The Djibouti Ports & Free Zones Authority partnered with China Merchants Group, Dalian Port Authority and IZP
6	Eritrea, 2006 [Agro, Processing]	Assab free trade zone	Assab port Tariffs and quotas exemption; reduced bureaucratic requirements.	Transhipment port	
		Massawa free trade zone	Massawa	Foreign trade	
7	Ethiopia [Agro, Processing]	Bulbula Integrated Agro-Industrial Park	Oromia Land leases supplied by govt; shared infrastructure services; fiscal (income-tax exemption period and customs duty exemption and non-fiscal incentives	Agro-industries; Food-processing	Public Private Partnership
	Ethiopia [Agro, Processing]	Bure Integrated Agro-Industrial Park	Amhara Land leases supplied by govt; shared infrastructure services; fiscal (income-tax exemption period and customs duty exemption) and non-fiscal incentives	Agro-industries; Food-processing	Public Private Partnership
	Ethiopia [Agro, Processing]	Baeker Integrated Agro-Industrial Park	Tigray Land leases supplied by govt; shared infrastructure services; fiscal (income-tax exemption period and customs duty exemption) and non-fiscal incentives	Agro-industries; Food-processing	Public Private Partnership

S/N	Country, Year [Agro activity]	Name of Zone	Location; Development/implementation model	Type of economic activity	Type of financing; Status
	Ethiopia [Agro, Processing]	Yirgalem Agro-Industrial Park	Southern Nations, Nationalities, and Peoples (SNNP) Land leases supplied by govt; shared infrastructure services; fiscal (income-tax exemption period and customs duty exemption) and non-fiscal incentives	Agro-industries; Food-processing	Public Private Partnership
8	Gabon, 2010 [Agro, Processing]	Nkok Special Economic Zone	Nkok; Levies and duties exemption; tax breaks; reduced bureaucratic requirements.	Timber processing and paper pulp mills.	Public-private partnership between the Gabonese government and Singapore-based Olam International
9	The Gambia, 2018 [Agro, Processing]	The GIETAF Special Economic Zone	Yundum; Exemption from import duty in respect of capital goods in accordance with the Customs and Escise Act, 2010. Additional deduction from taxable income of 50% of training, research and product development costs. Foreign ownership of investments.	SEZ -Special Economic Zone	Public private partnership between the Gambia Investment and Export Promotion Agency (GIEPA) and TAF Africa Global Limited (TAF).
10	Ghana- 1995 [Agro, Processing]	Tema EPZ	Tema; Duties and levies exemption, Tax breaks, Relaxed licensing and custom requirements; Infrastructure.	Agro-processing, Oil and Gas, Manufacturing, Mineral processing, ICT, Textile and garments manufacturing, etc.	Private sector
11	Kenya, 1990 [Agro, Processing]	EPZA - Export Processing Zones Authority Kenya	51 locations across Kenya; Exemption from value added tax, income tax, custom and excise duties, stamp duty and work permit quota.	Agro processing, Garment manu-facture, Pharma-ceuticals, etc.	Private Public Partnership
12	Madagascar, 1990 [Agro, Processing]	The Malagasy Zone Franche	Madagascar; A minimum tax collection of 5%, corporate tax at 10%, exemption of corporate tax for up to 15 years, a maximum of 30% income tax for expatriates and no VAT on imports.	Clothing manufacture and food processing.	Private Public Partnership
		The Moramanga Textile City	Antananarivo-Toamasina	Textile and fabric production	Private/Public sectors

S/N	Country, Year [Agro activity]	Name of Zone	Location; Development/implementation model	Type of economic activity	Type of financing; Status
13	Malawi, 1995 [Agro, Processing]	EPZ's- Export Processing Zones	No specific designated areas (they are situated in areas of convenience and choice to the investor); No VAT, 0% withholding tax on dividends, No	Production of natural rubber and wood products; macadamia and coffee as well as textile manufacturing.	Not sure
14	Mauritius, 1971 [Agro, Processing]	Mauritian Export Processing Zone	Mauritius; Generous long-term tax concessions; Custom duties exemption	Agro processing, Garment manufacture, logistics, etc.	Local investment and FDI
15	Mozambique, 2007 [Agro, Processing]	Nacala Special Economic Zone	Nampula province; Exemption of tax for the first 5 years, 50% tax reduction from 6th to 10th year and 25% tax reduction for the life of the project.	Agriculture, agro-business and textile production	Private sector
	2014 [Agro, Processing]	Mocuba Special Economic Zone & Industrial free Zone	Zambézia province; Exemption of tax for the first 3 years and 50% tax reduction from 4th to 10th year.	Aquaculture, commercial agriculture, agro-processing, livestock and dairy products.	Private sector
	2018 [Agro, Processing]	Ute's Special Economic Zone	Niassa Province	Logistical area for agricultural and forestry production	Public sector
16	Namibia, 1996 [Agro, Processing]	Walvis Bay Export Processing Zone	Walvis Bay; Exempted from corporate income tax, duties and value-added tax	Fishing related activities	Offshore Development Company
17	Nigeria, 2003 [Agro, Processing]	Airline Services EPZ	Lagos; Full foreign ownership of investments as well as 100% repatriation of profits capital and dividends.	Food Processing and Packaging	Private
	2014 [Agro, Processing]	Badagry Creek Integrated Park	Lagos	Fabrication	Kaztec Engineering
18	Rwanda, 2011 [Agro, Processing]	Kigali Special Economic Zone	Kigali; Free customs duty for imported good	Food and agro-processing, textiles and furniture-making.	Chinese Partnership
19	Senegal, 2007 [Agro, Processing]	Dakar Integrated Special Economic Zone	Dakar; 50 years period of validity of concessions, exemption of customs duties on equipment and raw materials; tax and duty free entry and exoneration of the payment of income tax.	Agro-processing of foods such as rice, cassava and corn	Private Public Partnership between the government of Senegal and Chinese investors

S/N	Country, Year [Agro activity]	Name of Zone	Location; Development/implementation model	Type of economic activity	Type of financing; Status
20	2019 [Agro, Processing]	South Agro-Industrial Processing Zone		Agriculture and agribusiness	
21	Sierra Leone, 2012 [Agro, Processing]	FIRST STEP	Freetown; Corporate tax exemption for the first 3 years as well as duty free status on all imported and exported goods.	Processing agricultural goods	Public-private partnership
22	South Africa, 1999 [Agro, Processing]	COEGA Industrial Development Zone	Port Elizabeth; Tax incentives, rebates and customs controlled areas.	Agro-processing	Government-funded
	2002 [Agro, Processing]	East London Industrial Development Zone	East London; Preferential land rental and utility rates, competitively priced land, duty-free imports for inputs used for export oriented manufacturing and zero rate on value added tax for locally procured supplies used in export manufacturing.	Agro-processing	Department of Trade and Industry (SEZ Fund – Capital Projects) and the Department of Economic Development Environmental Affairs and Tourism.
	2019(esti-mated) [Agro, Pro-cessing]	Richards Bay Industrial Development Zone	Richards Bay; Reduction in corporate income tax from 28% to 15%, VAT exemption for supplies procured in South Africa as well as duty-free on imports for production-related raw materials including machinery and assets used in production.	Agro-processing of foods such as sugar cane, fresh produce, field crops, livestocks and forest plantations.	The KwaZulu-Natal Provincial government
	2014 [Agro, Processing]	Dube Trade port Special Economic Zone	Durban; 15% Corporate Tax, VAT and customs duty exemptions, a section 12I tax allowance, a building tax allowance as well as employment tax incentives	Agriculture and agro-processing, including horticulture, aquaculture and floriculture	The KwaZulu-Natal Provincial government
23	Sudan, 2000 [Agro, Processing]	Suakin Free Zone	Suakin; Exemption from profits tax for a period of 15 years, Exemption of customs fees; depending on materials used and local costs incurred in production, salaries of expatriates working in projects within the free zones are exempted from personal income tax	Industrial activities such as the production of sugar, edible oils, textile and leather.	Sudanese government

S/N	Country, Year [Agro activity]	Name of Zone	Location; Development/implementation model	Type of economic activity	Type of financing; Status
	2009 [Agro, Processing]	Alijaily Free Zone	Exemption from profits tax for a period of 15 years, Exemption of customs fees; depending on materials used and local costs incurred in production, salaries of expatriates working in projects within the free zones are exempted from personal income tax	Agro-processing of products such as cotton, sesame, groundnuts, livestock and Gum Arabic.	Sudanese government
24	Tanzania, 2006 [Agro, Processing]	Benjamin William Mkapa Special Economic Zone	Dar es Salaam; 10-year Corporate Tax holiday and 30% tax rate on profits thereafter, a 10-year Withholding Tax holiday, duty and VAT exemption on inputs, raw material, capital goods and utilities.	Textile production and agro-processing	Government of Tanzania
	2017 [Agro, Processing]	Millennium Business Park	Dar es Salaam; Exemption from payment of VAT and customs duties for goods of capital nature, Exemption from withholding tax on rent, dividends and interest for 10years, exemption from VAT on utility and wharfage charges and much more.	Textiles and garments, agro-processing, leather processing and fish processing.	Government of Tanzania
	2017 [Agro, Processing]	Hifadhi Export Processing Zone	Dar es Salaam; Exemption from payment of VAT and customs duties for goods of capital nature, Exemption from withholding tax on rent, dividends and interest for 10years, exemption from VAT on utility and wharfage charges and much more.	Agro-processing, livestock and dairy products	Government of Tanzania
	2017 [Agro, Processing]	Kisongo Export Processing Zone	Arusha; Exemption from payment of VAT and customs duties for goods of capital nature, Exemption from withholding tax on rent, dividends and interest for 10years, exemption from VAT on utility and wharfage charges and much more.	Textiles and garments production and agro-processing.	Government of Tanzania
	2017 [Agro, Processing]	Global Industrial Park Export Processing Zone	Kisarawe; Exemption from payment of VAT and customs duties for goods of capital nature, Exemption from withholding tax on rent, dividends and interest for 10years, exemption from VAT on utility and wharfage charges and much more.	Textiles and garments, agro-processing, leather processing and fish processing.	Private Public Partnership

S/N	Country, Year [Agro activity]	Name of Zone	Location; Development/implementation model	Type of economic activity	Type of financing; Status
	2012 [Agro, Processing]	Kigoma Special Economic Zone	Kigoma – Ujiji Municipality; Exemption from payment of VAT and customs duties for goods of capital nature, Exemption from withholding tax on rent, dividends and interest for 10years, exemption from VAT on utility and wharfage charges and much more.	Agro-processing	Private Public Partnership
25	Togo, 1989 [Agro, Processing]	The Export Free Zone	Plateaux Region; No tax during the first 10 years' activity and stabilisation of the rate at 15% from the eleventh year, the exemption from all duties and taxes when exporting products imported or manufactured in the free zone, tax exemption on dividends during the first ten years for non-Togolese shareholders, the stabilisation of the payroll tax at the reduced rate of 2% during the company's lifespan as well as preferential tariffs on utility services.	Agro-industry, horticulture, wood processing industry as well as clothing and textile industry	Public sector
	2018 [Agro, Processing]	Togo Agro-Food Processing Zone (PTA-Togo)	Kara region	Agro-processing of food such as rice, maize, soybean, sesame, broiler meat and cashew nuts	African Development Fund
26	Uganda, 2014 [Agro, Processing]	Uganda Free Zones	10-year income tax holiday, 100% exemption from tax on income from agro-processing, 100% exemption on income derived from the operation of aircrafts in domestic and international traffic or the leasing of aircraft, exemption on plant and machinery used in the free zones for 5 years and 1 day from customs duty upon disposal	Commercial agriculture and agro-processing, food Processing, forestry and related products, livestock and dairy products as well as fishing	Public-private partnership
	2015 [Agro, Processing]	Nakaseke Special Economic Zone	Nakaseke; Duty Free Status	Agribusiness products	Turkey's ASB Group

S/N	Country, Year [Agro activity]	Name of Zone	Location; Development/implementation model	Type of economic activity	Type of financing; Status
27	Zambia, 2007 [Agro, Processing]	Chambishi Multi-Facility Economic Zone	Chambishi; 0% for the first 5-years profits are made, -50% of profits taxed for years 6 to 8 -75% of profits taxed for years 9 and 10 0% tax rate on dividends of companies operating under the MFEZ for a period of 5years from the year of first declaration of dividends and 0% import duty rate on raw materials, capital goods, machinery including trucks and specialised vehicles for 5 years.	Agriculture and agro-processing	China Non-Ferrous Metal Mining Corporation Limited (CNMC) with the support of both the Chinese and Zambian governments.
	2012 [Agro, Processing]	The Lusaka South Multi Economic Zone	Lusaka; 0% Import duty on capital equipment and machinery for first 5 years and accelerated depreciation on capital equipment and machinery.	Agro-processing, pharmaceutical and beverage production	Private sector
	2007 [Agro, Processing]	Zambia-China Economic & Trade Cooperation Zone	Central Copperbelt Province; 0% tax rate on dividends for 5 years from year of first declaration of dividends, 0% tax on profits for 5 years from the first year profits are made, for year 6 to 8 only 50 percent of profits are taxable and in years 9 and 10 only 75 percent of profits are taxable, 0% import duty rate on raw materials, capital goods, machinery including trucks and specialized motor vehicles for five years as well as deferment of VAT on machinery and equipment including trucks and specialized motor vehicles.	Agro-processing, pharmaceutical and beverage production	Chinese and Zambian governments.
28	Zimbabwe, 1996 [Agro, Processing]	Zimbabwe Special Economic Zones	Harare (Office); 5-year tax holiday. Following the initial 5-year period, tax is paid at a rate of 25%, rather than the normal rate of 35%. Duty free importation of raw materials and capital equipment for use in the EPZ; No tax liability from capital gains arising from the sale of capital invested.	Agro-Processing	Zimbabwe Special Economic Zones Authority

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