

AFRICAN DEVELOPMENT BANK GROUP



STAPLE CROPS PROCESSING ZONES (SCPZs): Promoting Sustainable Agricultural Value Chains.



A Stakeholders Engagement Report for the Staple Crops Processing Zone (SCPZ) in Togo, Senegal, and Guinea.

African Development Bank

April 2023

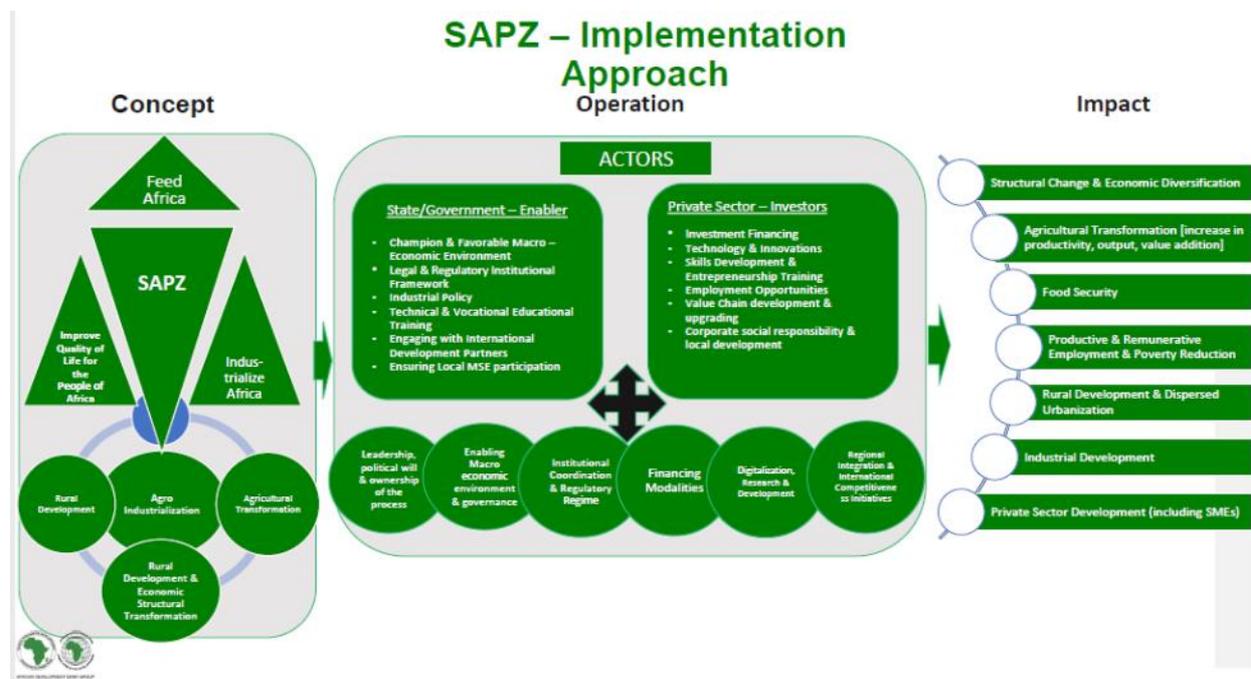
I. BACKGROUND

1.1 Objective of the mission

As requested, we undertook a mission to Senegal, Guinea, and Togo, from 13 to 28 March 2022. The objective of the mission is to further engage relevant stakeholders in each host country for information relevant to update the programme and collect more detailed climate and hydrological data to improve resilience aspects in the Funding Proposal (FP) submitted to the GCF. The African Development Bank (AfDB) has been working closely with the Governments of the four countries to prepare a funding proposal to seek additional financing to introduce mitigation and adaptation measures within the SCPZ Projects and their beneficiaries including smallholder farmers and cooperatives. A draft proposal was submitted to the GCF headquarters in 2021 and after a review by the Independent Technical Advisory Panel (ITAP) of GCF, the Bank was requested to provide additional climate and hydrological data to improve the resilience of the funded activities.

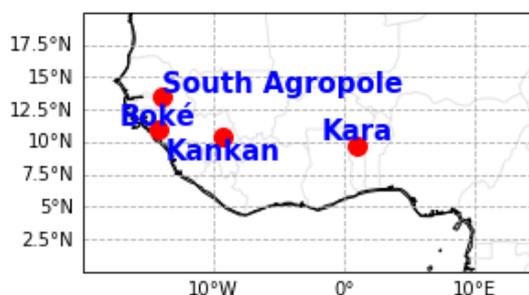
1.2 AFDB Special Agro-Industrial Processing Zones (SAPZ)

African Development Bank developed the SAPZ initiative as a Flagship of the Feed Africa Strategy. The SAPZ 's objective is to bring economic infrastructures to rural areas of high agricultural potential, in order to attract investments from private agro-industrialists and entrepreneurs, and contribute to the economic and social development of rural areas. The SAPZ approach is the following:



1.3 AfDB Funding Proposal (FP) to GCF: Staple Crops Processing Zone (SCPZ): Promoting Sustainable Agricultural Value Chains (Togo, Senegal and Guinea):

1.3.1 **Objectives, Components and Budget.** The SCPZ programme ambitions to reduce climate change vulnerability and greenhouse gas (GHG) emissions within the agricultural value chains in these four highly indebted poor countries in Africa. The GCF funds, along with the African Development Bank (AfDB) funds, other program financiers and the respective countries contributions, will be used to overcome critical infrastructure deficits, financial, capacity and institutional barriers that constrain the effective implementation of an integrated approach to climate adaptation and mitigation. Specifically, the GCF funds will be used to invest in: (i) strengthening of critical SCPZs value chains infrastructure and governance; (ii) promote climate resilient agricultural practices and technologies adoption; and (iii) programme management and coordination. The programme covers 4 zones across the four host countries, as showed:



The total cost of the SCPZ Programme (GCF + co-financing) is about USD 271.70m. GCF funding requested is USD 102.79m (USD 75.79m grant, USD 26.99m Loan). The allocation by country is indicated in the tableau below;

SCPZs Program Sources of Financing			
Togo	Financial Instrument	Sector	Amount USD (M)
African Development Fund (ADF)	Loan	Public	\$11,308,822.80
African Development Fund (ADF)	Grant	Public	\$6,519,451.95
Transition Support Facility (TSF)	Loan	Public	\$11,702,662.40
West African Development Bank (BOAD)	Loan	Public	\$17,600,000.00
Korea Fund (KF)	Grant	Private	\$5,000,000.00
Nigeria Trust Fund (NTF)	Loan	Public	\$5,619,480.00
Government of Togo (GoT)	Counterpart (Inkind)	Public	\$10,856,000.00
GCF Financing	Grant	Public	\$28,898,630.19
GCF Financing	Loan	Public	\$9,999,987.18
Total Financial Cost TOGO			\$107,505,034.53
Senegal			

AfDB	Loan	Public	\$47,448,790.00
Islamic Development Bank (IsDB)	Loan	Public	\$31,063,890.00
Government of Senegal (GoS)	Counterpart (Inkind)	Public	\$5,000,000.00
GCF Financing	Grant	Public	\$22,333,773.65
GCF Financing	Loan	Public	\$10,999,948.59
Total Financial Cost SENEGAL			\$116,846,402.23
Republic of Guinea			
African Development Fund (ADF)	Loan	Public	\$4,091,336.60
African Development Fund (ADF)	Grant	Public	\$4,022,919.60
Transition Support Facility (TSF)	Loan	Public	\$5,049,174.60
Government of Guinea (GoG)	Counterpart (Inkind)	Public	\$3,630,009.00
GCF Financing	Grant	Public	\$24,517,751.83
GCF Financing	Loan	Public	\$5,999,896.21
Total Financial Cost GUINEA			\$47,311,087.84
Total costs of ESS translation			
<i>GCF Financing</i>	Grant	Public	\$41,000.00
Grand Budget (GCF + Co-financing)			\$271,703,524.59

1.3.2 Additional data and domains to be strengthen: The comments received from the Independent Technical Advisory Panel (ITAP) of GCF, indicated that the AfDB have to collect additional data including the following;

On Climate:

- Daily precipitation (at least for 30 years, preferably for 1976-2005 or 1981-2010);
- Daily minimum and maximum temperature (At least for 30 years, preferably for 1976-2005 or 1981-2010);

Preferably, the data should be in gridded format to compare with the regional climate models used in the FP.

On Agro-hydrology

- Crops Calendar (e.g., staple food crops if available);
- Groundwater and surface water potentials/availability (project areas), properties and degree of restriction for irrigation;
- Groundwater types - (e.g. phreatic, free, alluvial, deep, fossil);
- Other surface and groundwater related indicators (e.g., Depth to GW -mbgl).

Others

- Focal point contacts for (i) private energy regulated boards in each country; (ii) national statistics departments (for crops survey and market surveys); (iii) ministries of agriculture, water resources, energy and forestry; and (iv) the Agropoles/SAPZ's in each country.

The data collected will enable AfDB to strengthen the FP in the following areas :

- *A climate rationale* using historical observed data sets and validated climate models to describe current and projected climate change trends; Climate Risk and Vulnerability assessments of the following : (i) Farmer and Agro processing MSMEs; (ii) Critical ecosystem resources (i.e., water resources, forest, land, soil); (iii) Agri infrastructure (e.g., irrigation, wells, boreholes, power, roads); (iv) Investments Agro-industries;
- *Disaggregate appropriate* and specific climate resilient agricultural (CRA) practices and AFM activities per countries per project area; addressing the specific context of vulnerabilities ;
- *Draft text of Last Mile Agreements* with the targeted beneficiaries doing CRA and AFM activities indicating awareness, understanding, ownership, and Statement of Intent to address the context of vulnerabilities identified under the CRVA;
- *Regulatory and market assessment* demonstrating the feasibility of an Energy Service Company (ESCO) solution for the operation of renewable energy supply installations in SCPZ in the four countries – including a :
 - legal and regulatory feasibility study in each country setting out the framework under which ESCOs operate;
 - *sample contract for each country for an ESCO operator of energy supply and agri-waste supply agreements (for Biodigesters) in an agricultural processing zone;*
 - revised assessment of the CO2 emissions reductions, integrating the comments received;
 - market study identifying the willingness to pay for ESCO services; and
 - revised technical and cost assessment of the Biodigester investments.
- *A market assessment of existing private sector* processing operations through e.g. farmer co-operatives; and
- *A proposal to make funding* for renewable energy supply installations available to privately operated processing zones.

1.3.4 Methodology for data collection:

The mission uses the methodology below to collect the required data :

- Prior to field missions, transmission of the data needed by submitting questionnaires through the bank focal points;
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- During the mission, meetings with the various institutions and stakeholders : the National and Regional Meteorological Centers, Ministries of Environment and Climate Change, Agriculture, Energy, Water Resources and Forestry, Trade and Industry, the IAIPs, a sample of farmers associations and cooperatives, among others;
- Distribution of two questionnaires to the farmers/cooperatives, ESCOs, etc. See annex;
- Organizing of site visits to Casamance in Sénégal, Boké in Guinea, and roundtable discussion in Lome, Togo.

II. MISSION OUTCOMES

2.1 SENEGAL

The mission Team worked in Senegal from 14 to 16 March. Work sessions (virtually and presential) was organized in Dakar with national authorities, technical Institutions, Agro-Hydro-Met services. The mission travelled to Ziguinchor in Casamance to meet regional authorities, farmers organizations, Civil Society Organizations, NGOs, SMSs, ESCOs and visited the site of the ADEANE Agro-Park one of the most important infrastructures of the South Agro-Industrial Processing Zone Project (PZTA-Sud).

The PZTA-Sud aims to contribute to the transformation of the agro-industrial sector, with a view to inclusive agricultural growth reducing poverty and food imports and generating employment. The total cost (net of taxes) is approximately EUR 87.75 million, broken down as follows: (i) ADB loan: EUR 43.1 million; (ii) IsDB loan: EUR 27.85 million, and (iii) the State: EUR 16.8 million. The project comprises 3 components: (a) Support for the establishment of a business ecosystem conducive to private investment in agribusiness; (b) Sustainable improvement of the capacity of agro-industrial producers; (c) Coordination, management and monitoring/evaluation.

An overview of the main discussion points raised during the site visit in Senegal (including the site visit in Cassamance) is tabulated below:

Day and date	Activity	Highlights
Monday 14 March	Mission Day 1 in Senegal	<p>Morning: Inception meeting with stakeholders at the Cellule d'Execution Bureau du Project Agropoles – Chaired by National Coordinator, Dily Lo:</p> <p>Key stakeholders present (online and remotely): NDA, Minstere de L'entreprise, Economie, Senelec, ASER, ANER, representatives from Agropoles, Centre d'etudes Ecologiques, etc.</p> <p>Key discussion points:</p> <ul style="list-style-type: none"> • There is strong political will to successfully complete the project as the development of the agropoles is a governmental priority

		<ul style="list-style-type: none"> • High energy cost is a key concern for farming communities in Senegal • There is a strong will from agricultural communities to produce their own electricity • The sale of electricity is regulated (new regulations being developed to encourage competitive distributed production and generation) • Senelec and Azer operate electrical networks in the south and energy production is about 20% RE (including off grid) • There exists a conducive fiscal environment to encourage investment in RE • Increased soil salinity is also a factor worsened by CC • There is a EWS in place in South Agropole but which can benefit from more met stations • There is a need for support to collect rainwater which is mention in the Plan d'Action d'adaptation du Senegal
edcc , nn	Mission Day 2 in Senegal	<p>Morning: Site Visit to in Naguisse</p> <p>Meeting with Sous Prefet of the Prefecture de Naguisse. Key points:</p> <ul style="list-style-type: none"> • Local communities are very keen on sustainable development of Agropoles. • There is a need to sensitize youth on the opportunities for employment associated with greening of agropoles. • The local government will provide all necessary support to the execution of the project <p>Meeting with deputy mayor, village chief (representing 30+ families), villagers, and employees of Agropole sud at Banganga (site of the centralised agro processing zone). Key points:</p> <ul style="list-style-type: none"> • Farming communities are looking forward for the setting up of the processing facility for their crops and cattle. Main produce are mangoes, maize, and nuts • Not all farmers are connected to the SENELEC- in some places the electrical network does not reach. The use of PV Moon and Baobab 220 W kits that can connect lamps and low load equipment. The kit costs CFA300k and is repaid over a few years • Villagers have access to meteorological data. For CFA1000 per year, they get weekly sms on weather conditions and alerts • It has been noted that weather patterns have shifted and with it they are facing more threats from pests • None of the villagers had a biogas kit. Vegetable waste are partly for compost and are partly nit used and allowed to decomposed. Animal waste is used as fertilizers. Farmers will prefer a domestic kit which can provide them with their electricity • The average electrical bill for a household is CFA 3000 -4500

- None of the farmers had a drip irrigation system and only one solar pump was available and is sometime clogged with mud. They struggle for water in the dry season and other wells are operated manually

Afternoon:

Meeting with the community representatives of the south agropoles, with the University of Zinguichor, Deputy Mayor, ANACIM representative of the south, representatives of the women group, Agro ecologique, etc.

Key points:

- Community is keen on the implementation of sustainable agro processing activities. However, communities are concerned with the high electricity cost and the lack of water during dry season. Some farmers have also been disconnected from the grid because of incapacity to pay their power bills
- Recently new starters in agro business have taken a long time to break even in their investments because of the various constraints including CC
- The lack of water can sometime lead to conflicts between cattle owners and planters and cattle will tend to graze in plantations when there is lack of fodder
- Women play a critical role in the agro- processing chain and it is very much a family undertaking. However, there is a need to focus on awareness and training on women to help them better understand new agro processing techniques as well as green technologies. Women have strong entrepreneurial skills and can be effective champions of the new measures/ systems to be put in place
- There very few planters throughout the agropole having access to DIDS – the cost is prohibitive, and rodents and bird damage the infrastructure
- The University of Ziguinchor fully endorse the project and will provide all necessary support in its implementation (data collection, sharing, capacity building, etc.)
- Solar solutions for lighting and pumping are highly sought after. Solar pumps should however be designed to be able to provide power for irrigation at night. Quality of some solar panels have also been sub standards;
- It is estimated that less than 1 % of all the farmer and farmer groups have drip irrigation system in place in their premisses
- Some 4 families have benefitted form biogas kits (20L) under certain conditions under the Programme National de Biogas. However, project was not extended further and of the 4 biodigesters provided in the community, only 1 is operational. Picking up cow dung is an issue as it is time consuming if area to be covered is large
- Other issues mentioned for the biodigesters include financing constraints, issues with construction and sizing of the

		<p>biodigesters. The University has also done extensive research on bio digestion.</p> <ul style="list-style-type: none"> • It was mentioned that in case community based biodigesters are set up, a model is to be developed to ensure that farmers providing organic material for the bio digesters are compensated • As per SOCAAS (Societe cooperative des acteurs de l'Agropole Sud) there are private companies willing to invest in RE systems to supply agricultural communities • There is a need for capacity building on how to better use biomass • USAID funded the establishment of an early warning system in the region- farmers have access to climate data throughout the year for CFA 1000. However the coverage is not 100% . the development of an audio based EWS mechanism in French and Wolof is being developed • The occurrences of forest fires are not covered in the EWS. The EWS can also be used as medium for educating population on CC. there is a need to increase collaboration between ANACIM and University of Ziguinchor • The sharing of the climate data is subject to a fee as it is regulated by a presidential decree. Discussion will be held by the Senegalese stakeholders to see how this can be waived as it will benefit the country • A survey for the willingness to pay for the ESCO services will be circulated to the farmers and some 40-50 replies are expected by 26 March
<p>Wednesday 16 March</p>	<p>Mission Day 3 in Senegal</p>	<p>Morning: Wrap up meeting with stakeholders at the Cellule d'Execution Bureau du Project Agropoles – Chaired by National coordinator Dily Lo:</p> <ul style="list-style-type: none"> • The NDA reiterated their strong support for the project. • The way forward for the climate data will be discussed at gov level. It was pointed out that project will support ANACIM through project activities • The information for the water levels, mapping of wells and evaporation rate etc will be provided by the direction générale gestion et la planification ressources en Eau (DGPRE) • SENELEC has been providing better power quality in the southern region and will provide necessary information on the electrical network and its reach in south agropole • Agence Sénégalaise d'Electrification Rurale (ASER) has some network coverage in the south • The need to carefully consider the regulatory aspect of integrating private power producers on the grid or off grid should be assessed • The West African Development Bank is also funding a EUR 15 rural electrification project in the country covering the south

		<ul style="list-style-type: none"> • The gender disaggregation of data for some sectors is available • The need for DIDS has again be reiterated and is cross cutting for the use of biogas. DIDS will allow efficient use of water in the dry season and will allow growing of fodder for cattle which in turn will result in increased organic matter for bio digesters • As per the Agence Natioal d'Energioe Renouvebales (ASER), the national biogas programme established by government is working with the private sector for the development of a bio digesting kit. Recent experiments indicate that small portable kits are preferred • The Programme National de biogas is planning for distribution of bio digesting kits in the country including in south agropole • The consolidated requirements for the mission will be communicated to the coordinator by Thursday 17 March.
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In summary;

- With the upcoming setting up of the agro industrial park, the local communities are looking forward to a boost in the socio economic activities. There are however key climate issues to be addressed to boost production in the South Agropole and also to enable more households to have access to green and reliable source of electricity.
- There is high level ownership for the project and all stakeholders are very keen on securing the additional funding from the GCF. The coordinator is the key focal point for the provision of information.

2.2 GUINEE

The mission worked in Guinea from 17 to 20 March. Work sessions habe been organized in Conakry with national authorities, technical Institutions, Agro-Hydro-Met services. The Team travelled to BOKE to meet regional authorities, famers organizations, SMSs, ESCOs and to visit the site of the Agro-Park, one of the major infrastructure of the Boké and Kankan Special Agro-Industrial Processing Zones Development Programme (PDZSTA-BK). The PDZSTA-BK is the first phase of a programme to develop ten (10) Agro-Parks. Its goal is to contribute to the reduction of food imports and improve Guinea’s food and nutrition security by establishing private sector-driven agro-industrial development hubs. The programme will be implemented through the following three (3) components: (i) Establishment of governance in the Special Agro-Industrial Processing Zones (APZ); (ii) Development of processing and access infrastructure; and (iii) Programme coordination and management.

An overview of the main discussions points raised during the site visit in Guinee (including the site visit in Boke) is tabulated below:

Day and date	Activity	Summary or meeting
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<p>Thursday 17 March</p>	<p>Mission Day 1 in Guinea</p>	<p>Morning:</p> <p>Meeting at l’Autorite de Developpement et de l’Administration des Zones Economiques Spéciales (ADAZZ) in Conakry chaired by Oumar Barry Deputy National Director of the Ministry of Economy, Finance and Planning. Were also present, Mr Mohamed Gassama, Director ADAZZ, Mr Laye Sako (National Coordinator), Alhassane Toure, Procurement Specialist. Participants included representatives of authorities responsible for the rural electrification, Electricite de Guinee, Renewable Energy, Met Services, Utility regulator, Ministry of Agriculture, Water resources management, Ministry of Industry, Ministry of Fisheries</p> <p>The key points discussed in the meeting are as follows:</p> <ul style="list-style-type: none"> • The Chairperson reiterated that the government is committed to ensure that the implementation project funded by AfDB gathers pace and that the GCF project for Guinee is also high in the governmental priorities. The GCF funded project is aligned with the country’s NDCs, and will help in alleviating poverty while at the same time leveraging private sector investment which is critically needed • The setting up of the full organisational structure for the AfDB funded project is yet to be put in place and core team is operating from Conakry • Climate data is available from the National Statistic Office (yearly) as well as from the Met Services but daily records might have gaps. The Office of statistics collected data through the support of the Bank • Weather stations are present in both Boke and Kankan, but equipment condition is not optimum and there is a lack of capacity to maintain these equipment • Under a UNDP/GEF project, 26 automatic weather stations are being installed with connectivity services (including a server in Conakry) for early warning system. The project is expected to be completed by end 2023 and will help establish a general early warning system that will be communicated in local language. However, the system will not be used specifically for agricultural activities • Due to lack of resources, there are capacity gaps and shortage of personnel at the Met Services to operate new equipment as per WMO standards. The bulk of the equipment in place is dated and it is challenging to install new equipment given the lack of stable power supply. Some stations use solar PV but are not regularly maintained resulting in data gaps from some stations • Insolation and wind data is being collected at Kankan and another site by Electricite de Guinee as part of a resource mapping exercise. • There is no national plan for drip irrigation distribution systems (DIDS)although there is some awareness at community level on the benefits of the systems. DIDS are however needed in Boke and Kankan due to the observed prolonged dry season and excessive heat. Support for the establishment of greenhouses with DIDS will help ensure crop rotation during dry season.
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- Classical irrigation systems used are not efficient and result in losses. In some areas of Kankan, the evaporation rate is extremely high.
- Most of sources of water include surface water and shallow wells (less than 10 m). there is little to no data on underground water and lack of water is really affecting communities, particularly in dry region of Kankan.
- The Direction National de l'hydrologie has very little records on level of underground sources.
- UNDP/GEF funded a pilot project on the installation of biodigesters. There was no follow up on the project after completion and it is unclear how many of the installed biodigesters are still in operation. The prospect of using waste for generating biogas and electricity is appealing for some communities although some communities use agro waste as fertilizers. Cow dung is usually not collected but if incentivised, it can encourage communities to promote collection for use in biodigesters. Given the spread of the communities with Boke and Kankan, small bio digesting units might be the preferred choice.
- There is currently no ESCO operating electricity plant run by biogas in Guinea. There is however a market for ESCOs operating diesel generator plants to supply communities in the agro parks. Some of these private companies are connected to the network of EDG and PPAs for supply of electricity on the network are signed. Some IPPs also supply their own distribution networks in areas with no network coverage from EDG
- EDG is only present in some localities of Boke and Kankan and most farmers do not have access to electrical power from the grid. Although there is no data available, many communities in Boke and Kankan buy electricity from private operators of use solar panels commercialised by Orange.
- The regulator is in the process of developing methodology for determining tariff for electricity. At the moment, private sector operators connecting to the grid, negotiate their tariffs with the Ministry of Energy. Regulations to promote further private sector investment in the rural sector is being developed

Afternoon:

Meeting with Met Services, Direction National de l'hydrologie, Stats Office

The key points discussed in the meeting are as follows:

- The data set for 30 years for the Kankan and Boke regions are available but there are data gaps. There are not many weather stations in Boke and the information on the evaporation rates can be found from the water services
- For the level of ground water, there is no long duration data (less than 1 year available for a few spots only)

		<ul style="list-style-type: none"> • The DNH licenses the use of water for mining purposes only. There are no regulations on the use of water for agricultural purposes. • The mining sector taps in water for washing purposes and this dirties the water in some locations thus affecting agricultural use. Farmers usually use artisanal irrigation purposes. For rice production, water pumps are used in some places • There is no data being fed to the MWO network. One met station is being installed to be able to send data as per WMO standard by mid-year. There is however a need to train technicians on how to properly code the data • There is no dedicated system in place for EWS for farmers although the backbone for an EWS is being set up under a UNDP GEF project (see above) • There is an urgent need to build capacity in all institutions dealing in environmental matter and data collection <p>Meeting with AfDB Country Manager (CM)</p> <p>The key points discussed in the meeting are as follows:</p> <ul style="list-style-type: none"> • The logistical arrangements for the site visit to Boke were finalised • AfDB is working in close collaboration with the Gov of Guinea to ensure that the implementation of the Agropole project is stepped up to meet the project targets • Agriculture has a high economic potential in Guinea given the coverage of fertile land and the availability of cheap labour. Better access to good and sustainable infrastructure is key to catalyse the sector • Further funding is in the pipeline for the next development of the agro processing zones in the next funding window at the level of the Bank
<p>Friday 18 March</p>	<p>Mission Day 2 in Guinea</p>	<p>Morning: Site Visit to in Boke (leaving Conakry at 0530 reaching Boke at 1300)</p> <p>Afternoon:</p> <p>Meeting with the community representatives of Boke chaired by the Secretary General of the Governor of Boke in presence of the regional administration team. Were also present representatives of SMEs (in agro industries) Youth groups, women organisation, farming communities, civil society.</p> <p>The key points discussed in the meeting are as follows:</p> <ul style="list-style-type: none"> • The Chairperson welcomed the delegation and stressed on the commitment of the communities in the Boke region to provide all necessary support to ensure the finance for the GCF project is secured. The project alongside the AfDB funded project is seen as crucial for the socio-economic development of the region and more awareness session on the AfDB and GCF projects ae encouraged to ensure there is timely buy in of the communities.

The various group leaders echoed their concerns on the delays in the start of the AfDB agropole project in the Boke community.

- The local government has a investment plan focussed on the development of the sector and aligned with the national priorities but will required financial and technical support to come to fruition.
- Private sector is willing to invest in agricultural infrastructure in the region but investment costs are high
- There is a strong entrepreneurship culture in the Boke communities and increased awareness and capacity building will be very helpful to help meet developmental goals through local entrepreneurs.
- Bio agriculture is favoured by the young entrepreneurs and there is a strong need for training on climate resilient agriculture
- The region has a strong potential for economic growth through sustainable agriculture and there is a need to build capacity and provide necessary infrastructure to fully tap in this potential. Some produce like cashew production is not fully exploited- only the nut is used while there is potential to extract the juice and use the pulp also.
- The use of PV (small kits) is widespread in the community. However, the quality is poor and due to lack of maintenance, some kits fail eventually. Although there are no figures, it is estimated that around 3 out of 4 farmers use solar kits (that allows connection of 5 lamps, 1 tv and charging points). These kits are commercialised by Orange or have been provided by the mining companies.
- Access to energy is a major barrier in the overall development of the communities in Boke. Communities are already paying private sector operators for access to electricity (mostly through fossil fuels), but it is important that regulations are put in place to ensure that tariffs are not excessive. The grid of EDG is only in Boke with little to no connectivity to the grid in the neighbouring villages.
- The women entrepreneurs are very keen on the use of PV kits in the transformation process of agricultural goods. There are a few systems in place which have broken down due to lack of maintenance
- If there is a possibility of having access to small biogas kits, villagers will be willing to collect organic waste as access to electricity will enable them to improve their productivity
- Farming communities are affected by the expansion of the mining industry
- Population growth means that the need for stable energy supply is becoming more and more critical and so is the need for employment. With the natural resources available, agriculture is the favoured economic activity. However, youth are more and more engaged in the mining sector as it offers more economic stability
- There is a critical need to modernise local production techniques. Lack of water, proper production, harvesting, storage and processing facilities result in the local rice being more expensive than imported rice

		<ul style="list-style-type: none"> • Water scarcity is a real issue during the dry season and DIDS are a real solution but access to these systems are restricted due to the excessive costs. Farmers who do not have access to surface water or rivers usually use artisanal wells (less than 10 m deep) for their supply of water. None of the farmers present used DIDS as it was too expensive and only used by large private sector groups • It has been observed that the water levels over the years during the dry season is reducing gradually • More extreme temperatures are noted in the dry season, and this affects the production of vegetables and other produce. • There are no biodigesters being used in the communities and depending on the size of cattle owned and agricultural practice, some farmers are very keen to collect organic matter for use in bio digester. However, the cost of the biodigester is prohibitive. • The Boke area also has a great potential for sustainable fisheries but there is lack of technical and financial support for artisanal fishers <p>Site visit to the location shortlisted for the setting up of the agro processing park (to be funded by AfDB)</p> <ul style="list-style-type: none"> • Feasibility studies are being undertaken to determine which of the 2 sites are best suited for hosting the agro processing park. The tendering exercise will be initiated based on the recommendation of the studies (expected by mid-2022);
<p>Saturday 19 March</p>	<p>Mission Day 3 in Guinea</p>	<p>Morning: Visit at a cashew storage facility under construction in Kolaboui:</p> <ul style="list-style-type: none"> • Diaoune et Freres is setting up a cashew storage and processing plant in Kolaboui on 3 ha of land. The company is already operating in Kankan and is expanding its business in the Boke region. • The storage facility will be powered by generator sets (diesel). Water is being sourced from a well (64m) which has been drilled by a specialised international firm <p>Visit to a rice processing plant in Denken</p> <ul style="list-style-type: none"> • Private operator is cultivating 500+ ha of rice fields and has set up a processing and storage facility. The rice produced is for local market • The fields are only productive during the rainy season with no infrastructure in place to store water or access water from the nearby river. • The area is also rich in cashew nut trees fields • With better water management, at least 1 more harvest is possible. During the dry season the company generates revenue from the growth of vegetables under greenhouse using water sourced from wells and supplied through drip irrigation • The facility is powered by a 1.4 MW diesel gen set with a spare 1 MW set. Lighting is provided through solar panels

		<p>Afternoon:</p> <p>Return to Conakry (leaving Boke at 1330, reaching Conakry at 21hrs)</p> <p>Wrap up meeting with Mr Mohamed Gassama, Director ADAZZ, Mr Laye Sako (National Coordinator), Alhassane Toure, Procurement Specialist and Mohamed Bangoura (Communications Coordinator for the government):</p> <ul style="list-style-type: none"> • Government will provide full support to ensure that the GCF funding proposal can be resubmitted • Communications is a key tool to ensure that communities are aware of the project and have full ownership and government will provide necessary support to communicate on the project and also help leverage further climate finance
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In summary;

- Very little progress has been made on the setting up of the agro processing parks in Kankan and Boke with administrative delays noted. However the team at ADAZZ and the AfDB are committed to ensure that no further delays are encountered as communities in Boke and Kankan are extremely keen on these infrastructure for the socio economic development of the regions.
- The GCF project will complement the planned activities as the communities are suffering from lack of appropriate infrastructure to climate proof agro pastoral activities. Low access to energy and longer dry seasons have been listed as key issues faced by the communities in both Boke and Kankan
- The team at ADAZZ is extremely proactive and is providing full support and collaboration. High level of state ownership has also been observed and the project is being followed very cl

2.3 TOGO

The mission worked in Togo from 21 to 23 March, and have the opportunity to attend work sessions in Lomé with national authorities, technical Institutions, Agro-Hydro-Met services, as well as KARA Regional authorities, famers organizations, SMSs, ESCOs. Due to the long distance, the mission was not able to travel to KARA to visit the site of tha Agro-park (Broukou) and other Infrastructure for aggregation and access to agricultural inputs and services (ATCs). However, the concerned stakeholders from KARA have joined the meeting in Lomé.

The Togo Agro-Food Processing Zone Project (PTA-Togo) aims to: (i) facilitate private investments in key areas thanks to policy support, governance and incentive measures; (ii) promote the development of priority value chains through the establishment of infrastructure to support production, storage and processing; and (iii) build the capacities of stakeholders in priority agro-industrial areas. The total pre-tax cost of

about UA 45,066,070 (about CFAF 35.194 billion), broken down as follows: (i) ADF loan: UA 8.04 million (17.8%); ADF grant: UA 4.046 million (10.3%); TSF loan: UA 8.32 million (18.5%) (ii) BOAD: UA 12,804,920 (28.4%); (iii) Saemaul Globalization Foundation: UA 3,524,190 (7.8%); and (iv) State: UA 7,741,950 (17.2%). The project has four components: (a) support policy, governance and incentive measures; (b) infrastructure for processing and accessing agricultural inputs and services; (c) capacity building for actors in priority agricultural chains; and (d) coordination, management, monitoring and evaluation.

An overview of the main discussion points raised during the site visit in Lome is tabulated below:

Day and date	Activity	Summary of meeting
Monday 21 March	Mission Day 1 in Lome, Togo	<p>Morning:</p> <p>Virtual meeting with the Permanent Secretary (PS) of the Ministry of Economy and Finance and his team on the purpose of the mission. AfDB's Senior Agricultural Officer and</p> <p>The key points discussed in the meeting are as follows:</p> <ul style="list-style-type: none"> • The PS welcomed the AfDB team and highlighted how strategically important the modernisation of the agro processing zone is to the socio-economic development of Togo and pledged the full support of the government for the project to materialise. • All relevant stakeholders have been convened to the meeting and will be providing all necessary support to ensure that the required information is provided on a timely basis • The midterm review of the AfDB supported project is well underway and government is looking forward to implementing similar set ups throughout the country. • The inclusion of a climate resilient component to the agro processing zone is aligned with the government priorities and the expectation from government is that the project implementation is started in early 2023 so that it can be recorded in the mid term review of the 2020-2025 governmental programme. Moreover, the project team established for the AfDB co-funded project is now in place and has the capacity to implement the • He highlighted that the agricultural production in the north is being affected by lack of water which is increasing the extent of arid lands • He wished the team all the best for the mission <p>Afternoon:</p> <p>Meeting at 'l'Agence de promotion et de développement des agropoles au Togo (APRODAT)'. The meeting was attended by the National Coordinator for the Agropoles project, the representative of the GCF National Designated Authority for Togo and representatives from the following organisations:</p> <ul style="list-style-type: none"> • Farmer associations in the region of Kara

- Ministry responsible for matters of environment
- Forestry services
- Irrigation
- Ministry of finance and economy
- Meteorological services
- Renewable energy agencies (public and private)

The following points were discussed:

- Meteorological data is not available for all stations in Kara for 30 years. However, some stations outside of Kara region have daily records for the last 30 years and in some cases, there might be data gaps
- The full cartography of the location of the boreholes is available. However, there has been no water level monitoring
- The water discharge from boreholes is not monitored and is usually mostly used for domestic purposes. The use of water is regulated under the 'Code de l'Eau'
- Besides from boreholes, the Kara region is also supplied in water through 3 dams and the construction of a dam for a hydro electricity project is currently in the pipeline
- For the early warning system, the Agence Nationale de Protection Civile (ANPC), works closely with the meteorological services and relays critical information to regional offices who further share the information through social media or national local media (press, radio, etc). The information relayed is mostly about the weather events (flooding) and is not tailored for agricultural purposes. Improvements are required for better real time warnings and to account for landslides, violent winds, pest invasion and bush fire.
- The EWS for flooding was put in place by the Red Cross using buoys in waterways. All information related to the EWS is channelled through governmental agencies
- The backbone of the EWS was set up with the support of the World Bank and UNDP and has helped to significantly reduce the number of flood victims.
- The met services are planning to install more meteorological stations to gather more detailed information in order to better serve agricultural and fishing communities. However capacity building is required to ensure the EWS can be tailored for agricultural purposes.
- The use of Drip Irrigation Distribution System (DIDS) is not common practise in the region of Kara despite its benefits being widely known. The state has planned to procure DIDS for 5,000 ha throughout the country for deployment through a subsidised approach. However, this will not be enough for most farmers including in the Kara region.
- Artisanal irrigation is the most common type of irrigation system used in the region. The unavailability of water during the dry season results in communities focusing on cattle breeding and hunting during the dry season. However, the communities would prefer to continue farming as it is a more reliable source of income
- it has been noted that the dry season is notably longer. This has caused migration from the north (Sahel region) and competition

		<p>for land and water resources is increasing. The migration from the north has also brought more cattle and this has further accentuated the competition for water and land resources</p> <ul style="list-style-type: none"> • There is no national biogas programme in the country. However, experimentation has shown that use of biogas for electricity generation and fertiliser production can be very beneficial for the farming communities. There is a need to create awareness on biogas technology as lack of understanding of the concept and benefits is also limiting uptake of the technology • Auctioning/ sale of cattle is conducted on a regular basis in specific locations in Kara and the potential to collect organic matter in these centres for biogas production is significant • In terms of electrification of the rural zones, the construction of a 24MW hydro plant is planned to power 29 localities in the Kara region. • Despite the good insolation rate, there is no grid scale solar PV projects in the region, but the Togolese government is planning the distribution of discounted PV kits to enable access to electricity to remote communities • There are regulations in place for small scale distribute degeneration. Usually, installation of less than 32 kW do not require permits for operation • Youth groups are very keen on using latest clean technologies for entrepreneurship purposes in the agricultural sector • Women also have a key role in agricultural processes at both production and processing stages but lack the support in terms of appropriate equipment – lighting and electricity for storage and transformation
<p>Tuesday 22 march</p>	<p>Mission Day 2 in Lome</p>	<p>Morning : Wrap up meeting at l'Agence de promotion et de développement des agropoles au Togo (APRODAT)</p> <p>The same stakeholders and in Day 1 were present and the following were discussed:</p> <ul style="list-style-type: none"> • The main produce of the Kara region include corn, soja, rice, sesame, cashew, vegetables, fish and poultry • The setup of the agro processing zone in Kara was presented including the infrastructural requirements for water communications and power • The agro processing zone in Kara is a pilot and will be the basis for the implementation of similar structures throughout the country. The kara region covers approximately 700,00ha of agricultural lands • The agro processing zone will assist the local economy by encouraging transformation of agricultural produce for local consumption and export • The agro processing zone in Kara will consist of 14 sites and will directly support 400 youth and women to set up micro enterprises. Water wells were rehabilitated and 60 more put in

		<p>operation to support the agro processing zones and the different production and processing areas</p> <ul style="list-style-type: none"> • A matrix for the information required was developed with the project stakeholders to identify the key focal points for each sector and assign submission deadlines.
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In summary.

- The setting up of the agro industrial park in Kara is at an advance stage (works ongoing) and government is extremely keen to ensure that the project is successfully completed for replication in other parts of the country.
- The government counterparts and representatives of farmers have unanimously welcomed the support from the GCF project as it will help the communities be better prepared to face climate threats and be more self-sufficient in energy. Limited access to electrical energy and to water in the dry season have limited socio-economic development in the region
- l'Agence de promotion et de développement des agropoles du Togo (APRODAT) has a very dynamic team and the project is being followed at the highest level at the central government level as it is one of the development of the agro industry is one of the key economic pillars of the governmental programme. The coordination team is already providing the data required for the update of the GCF FP

III. STATUS OF DATA COLLECTION

3.1 Status of data collection

The summary of the data collection process as of 5 April 2022 is as follows:

Country and focal points	Information requested	Status as of 5 April 2022	
		Received data	Pending Data
Senegal (Agropole Sud) Dlily Lo / Mamadou Kane	General Data (mapping, stats/ economic indicators/ national/ regional development plans)	Available publicly online	
	Meteorological data (rainfall, Max/Min temperature)		Pending from ANACIM
	Hydrology Data (water demand, evaporation rates, river discharge, etc)		Pending from DGPE
	Early warning system (policy, status, and planned activities)		Pending from ANACIM

	Biogas (Policy, statistics on use, development plans, volume of waste generated, etc)	Only information on livestock type and population received.	Others pending
	Energy sector (policy in place, data on electricity access in Casamance region, Renewable Energy penetration, future, challenges)	Policy document received	Others pending
	Contact details of ESCO's (for survey)	received	
	Last Mile Agreement		To be sent to ESCOs upon receipt of contact list
	Willingness to pay for ESCO services (survey)	received	
	Other similar projects in the pipeline)		pending
Guinea (Boke, Kankan) Sacko Laye/ Leandre Gbeli	General Data (mapping, stats/ economic indicators/ national/ regional development plans)	Received	
	Meteorological data (rainfall, Max/Min temperature)	Annual precipitation received, rainy days, maximum and minimum temperatures –	
	Hydrology Data (water demand, evaporation rates, river discharge, etc)	Data received	missing GPS coordinates for stations for river discharge
	Early warning system (policy, status and planned activities)		Awaiting information on ongoing UNDP GEF EWS project
	Biogas (Policy, statistics on use, development plans, volume of waster generated, etc)	received	
	Energy sector (policy in place, data on electricity access in regions, RE penetration, future plans, challenges)	received	
	Contact details of ESCO's (for survey)		pending
	Last Mile Agreement		To be sent to ESCOs upon receipt of contact list
	Willingness to pay for ESCO services (survey)	received	
	Other similar projects in the pipeline)		pending
Togo (Kara) Mr Ali Tagba/	General Data (mapping, stats/ economic indicators/ national/ regional development plans)	received	
	Meteorological data (rainfall, Max/Min temperature)	received	

Gilbert Adjimoti	Hydrology Data (water demand, evaporation rates, river discharge, etc)	Received but annually	
	Early warning system (policy, status and planned activities)		pending
	Biogas (Policy, statistics on use, development plans, volume of waster generated, etc)		pending
	Energy sector (policy in place, data on electricity access in regions, RE penetration, future plans, challenges)	Some documents available online	
	Contact details of ESCO's (for survey)	received	
	Last Mile Agreement	pending	
	Willingness to pay for ESCO services (survey)	received	
	Other similar projects in the pipeline)	Some projects provided	

IV. **CONCLUSIONS AND RECOMMENDATIONS**

- Mission was intensive but generally successful
 - The four countries have specific requirements and data challenges
 - All key project stakeholders were briefed on the project and data requirements
 - A strong political will to see the project approved was noted and stakeholders also demonstrated a keen interest in the project as it will help to address key climate and sustainable development challenges they face
 - Information gathering has begun with each country having its specific challenges. The team has not being able to contact stakeholders in the Amhara and Tigray region and feedback from these regions might be delayed
 - The information received/ to received will help address the GCF comments
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