ADAPTATION FUND

REQUEST FOR PROJECT/PROGRAMME
FUNDING FROM THE ADAPTATION FUND

« PROMOTING CLIMATE-SMART AGRICULTURE IN WEST AFRICA »

The annexed form should be completed and transmitted to the Adaptation Fund Board Secretariat by email or fax.

Please type in the responses using the template provided. The instructions attached to the form provide guidance to filling out the template.

Please note that a project/programme must be fully prepared (i.e., fully appraised for feasibility) when the request is submitted. The final project/programme document resulting from the appraisal process should be attached to this request for funding.

Complete documentation should be sent to:

The Adaptation Fund Board Secretariat
1818 H Street NW
MSN P4-400
Washington, D.C., 20433
U.S.A.
Fax: +1 (202) 522-3240/5
Email: afbsec@adaptation-fund.org

ADAPTATION FUND

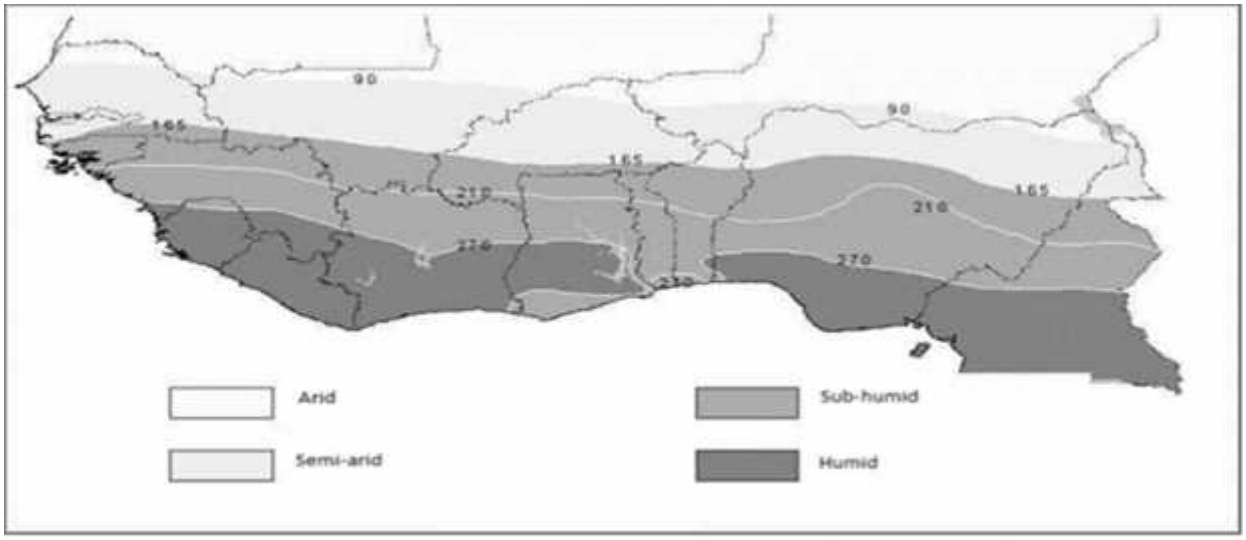
PROJECT/PROGRAMME PROPOSAL TO THE ADAPTATION FUND

PART I: PROJECT/PROGRAMME INFORMATION

Project/Programme Category: **Food Security**
Countries: **Five (05) Economic Community of West African States (ECOWAS) Member Countries: Benin, Burkina Faso, Ghana, Niger and Togo**
Title of Project: **Promoting Climate-Smart Agriculture in West Africa**
Type of Implementing Entity: **Regional Implemented Entity**
Implementing Entity: **UEMOA's West African Development Bank (BOAD)**
Executing Entity: **ECOWAS Regional Agency for Agriculture and Food (RAAF) in collaboration with Directorates in Charge of Environment, Agriculture, and Livestock in the 5 countries indicated above**
Amount of Financing Requested**: US$14 Million**

1.1. PROJECT / PROGRAMME BACKGROUND AND CONTEXT

In West Africa, based on the amount of rainfall received annually, there are four agroecological zones: The arid or Sahelian zone (50% of the surface area), the semi-arid or Sudanian zone (20%), the sub-humid or Guinean zone (20%) and the humid or forest zone (10%) representing about 5 million km^2 (see map below)[1].



[1] FIDA (2001). L'évaluation de la Pauvreté Rural – Africa de L'ouest et du Centre. Rome, Italy.

According to the World Bank[2], agriculture, livestock and fisheries represent 35% of the Regional Gross Product, employ 65% of the active population and provide 80% of the food needs of the 290 million people living in the ECOWAS region. Livestock production represents up to 40% of the Domestic Gross Product and pastoralism provides 50% of the meat and 70% of the milk[3].

West Africa is a region conducive to the increase of agricultural production due to the availability of arable land, pastures and groundwater. Considered as the engine of economic growth in the ECOWAS region, agriculture is faced with major development challenges including being able to produce sufficiently to feed its 300 million inhabitants in a context marked by poor yields (less than 3 tons/ha for rice against 6 tons/ha in Asia), a limited use of fertilizers (in average 10 kg/ha against 100 kg/ha in Asia), a high demographic growth rate (between 2.2% to 3.6% per year depending on the country) and a very limited use of irrigation[4].

With its agroecological diversity, West Africa offers great potentials for increasing animal production. In the arid areas, pastoral and agro-pastoral livestock production systems are dominant. However, they are drought-vulnerable. In the semi-arid zones, the prevailing systems are pastoral and agro-pastoral as well as periurban livestock production systems that are vulnerable to drought, floods and bushfires.

Axes de transhumance transfrontalière au Sahel et en Afrique de l'Ouest.
Source : Elevage au Sahel et en Afrique de l'Ouest, Note aux Décideurs Numéro 3, CSAO/OCDE.

[2] World Bank. West Africa Unites to Improve Agricultural Competitiveness and Productivity. http://www.worldbank.org/en/news/feature/2011/05/25/west-africa-unites-to-improve-agricultural-competitiveness-and-productivity (accessed 8/14/2013)

[3] ECOWAS-SWAC/OECD (CEDEAO-CSAO/OCDE/CILSS). 2008 - Climate and Climate Change. The Atlas on Regional Integration in West Africa. Environment Series. Version française. http://www.oecd.org/swac/publications/38903590.pdf

[4] ECOWAS. 2013. Adaptation to Climate change in agriculture in West Africa

In the subhumid and humid zones, it is rather the mixed farming/livestock systems and the periurban livestock production systems which are the most developed and they are also vulnerable to floods, bushfires and vector-borne diseases, especially Trypanosomiasis. With over 60 million cattle heads and 160 million small ruminants and a high demand for animal products –mainly in coastal countries livestock represents a major leverage in eradicating poverty. Moreover, animal productions contribute to improving food and nutrition among populations through the inclusion of animal proteins in daily diets.

Climate change and variability are an added challenge for West African agriculture's capacity to produce enough food and maintain or increase its economic relevance in the region. Indeed, agriculture in West Africa is mainly rainfed and therefore highly sensitive to temperature and rainfall changes and variations. Even if the region has great potential in terms of irrigable land, this asset is not sufficiently enhanced. To illustrate, only 5% of the Sahel's potential is irrigated. In addition, farming communities in West Africa are especially vulnerable to the impacts of climate changes, notably due to the small size of their farms. In average, the surface cultivated by inhabitant is under 3 ha and this limits the possibility of adapting to the various climate conditions.

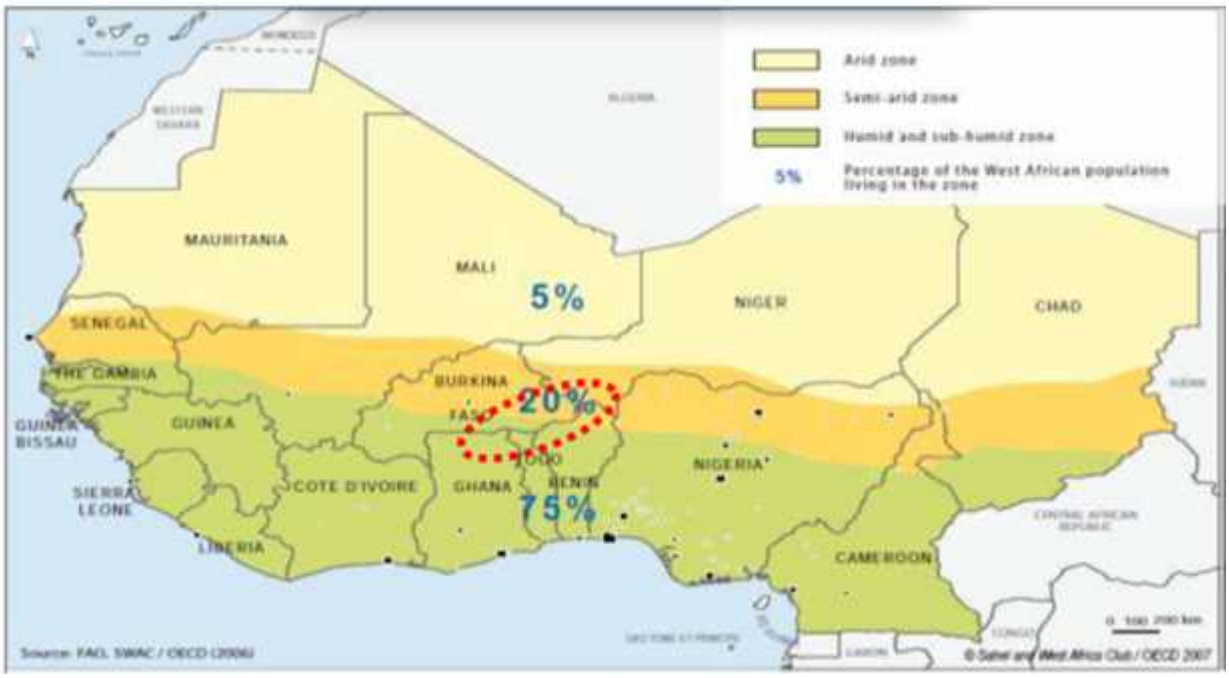
In spite of this context and other structural challenges (poor transport and marketing infrastructures, land tenure issues, etc.), as well as climate changes, public investments in agriculture remain low. However, the last decade was marked by an awareness of the relevance of agriculture and its crucial role in eradicating poverty and food and nutritional insecurity.

Yet, it is estimated that if agriculture does not adapt to climate change and variability (CC) and technological advances, its main crops' (millet, sorghum, cowpea, maize) yields will experience a 5 to 22% drop by 2050 depending on the type of crop and climate models. This would translate into the increased exposure of over 200 million people in West Africa (WA) to hunger and food insecurity, especially for the most vulnerable groups (women and children). This vulnerability is all the more acute in agroecological transition areas where climate changes associated with the joining and juxtaposition of various administrative, political and social realities hinder the implementation of efficient, coordinated and coherent initiatives for the adaptation of agro-sylvo-pastoral activities. The peculiarities of these strategic areas in terms of economic (goods, livestock, etc.) and demographic flows require region-wide approaches to meet this challenge.

In view of this situation, the ECOWAS and UEMOA Member States and their technical and financial partners in the agricultural sector, met in Bamako, Mali, in June 2015 and committed to work at implementing Climate-Smart Agriculture (CSA) in WA. More specifically, an Alliance on climate-smart agriculture in West Africa was created to incite households to adopt the practices with the vision of reaching 25 million farming households in Africa by 2025. This type of agriculture i) is adapted to the new climate constraints; (ii) ensures food and nutrition security; (ii) sustainably protects the environment, thus reducing agriculture-induced emissions.

This project fits into the implementation of the ECOWAS and UEMOA agricultural policy and the 2014 Malabo Declaration in which African Heads of States undertook to intensify agriculture to ensure food security. This project contributes to the operationalization of major commitments

made by ECOWAS and UEMOA for the development of agriculture in the context of climate change in their member countries. It will be implemented in an area covering the northern part of Ghana, Togo and Benin, the South-West of Niger and the South-East of Burkina Faso.



ISSUE OF CLIMATE CHANGE AND FOOD INSECURITY IN WEST AFRICA

In West Africa (WA), climate change is manifested through various facts like change in conditions related to production, planning and execution of agricultural activities. These include among others: (i) shifts in climate calendars (delayed rains for example); (ii) changes in rainfall patterns, especially the annual precipitations received, with, in most regions, more pronounced and more or less frequent dry spells; (iii) the increased frequency of extreme and abnormal events (storms, floods, abnormally high temperatures, etc.); (iv) finally, a high variability of time and space everywhere at local level[5] of the climatic parameters.

The impact of these climatic developments is all the more strong since family farming in the ECOWAS states is subject to other environmental changes: i) fertility degradation; ii) deforestation and erosion of biodiversity, (iii) inclusion in a market economy and liberalization with competitiveness requirements, iv) disadvantaged position in accessing resources (land, production inputs, technology, etc.), but also financing issues.

These climate changes affect the farming community, the capital of farms and their yields (less productive livestock and crop systems), but also the collective dynamics, contributing to exacerbate the vulnerability of the poorest inhabitants in rural areas, especially women and children. The decline in yield (livestock and crop systems), the impossibility to bring in to bear

[5] *Etude de capitalisation réalisée sur les terrains de coopération d'AVSF*, Marie-Josèphe Dugué, 2012

traditional risk management mechanisms and the high uncertainty weaken the systems and induce short-term strategies that are often detrimental to the economic sustainability of farms, ecosystems, social cohesion and, indirectly, the security situation.

In view of the effects of climate change, pastoralism in particular as a livestock production system based on the mobility of pastoralists and livestock, is increasingly constrained, notably by the drying off and decline in the nutritive quality of plants, the increased competition with agriculture, the reduced pastures, the occupation of routes, etc.

Consequently, the impacts on agriculture (in the large sense), food and nutrition security and the welfare of farming and rural communities are many. They have been initiated for several decades now in many West African countries, are accelerating and increasingly worsening. In economic terms, according to IFPRI6, they are generally of two types:

- Direct impacts on the productivity of family farms in plant and livestock productions and ;
- Indirect impacts on the availability of foodstuff on the national and international markets with consequences on the income generated by agriculture at State and farm levels.

In spite of some very limited positive impacts related to climate changes in some regions for some crops yield (maize, rice, etc.), climate changes will contribute to increasing food and nutrition insecurity in West Africa where about 34 million individuals, mostly women and children, are undernourished (SOFI, 2015).

Therefore, it is urgent to strengthen the actions that aim to support farmers in adapting their traditional knowledge and agricultural practices, and in strengthening the resilience of rural communities in order to also protect fragile ecosystems against future climate changes, especially in agroecological transition zones[7].

CLIMATE VARIABILITY/CHANGE AND TRENDS IN WEST AFRICA

According to the 5th Evaluation Report by the Intergovernmental Panel on Climate Change (IPCC), temperatures observed in West Africa have increased over the past 50 years. It was noted that the number of cold days and nights has dropped and that the number of hot days and nights have increased between 1970 and 2010[8].

Precipitations in the Sahel have generally decreased during the 20th century but have returned to their former level recorded in the 80s and 90s. This increase could be due to the natural variability of the climate or to anthropically-induced climate change. Several droughts observed in the Sahel during the 1970s and 1980s were well documented.

[6] West African agriculture and climate change : a comprehensive analysis / edited by Abdulai Jalloh *et al.* 2013

[7] *Changements climatiques en Afrique de l'Ouest : risques pour la sécurité alimentaire et la biodiversité*, OFEDI et GRAIN, 2009

[8] GIEC 2014

Regarding the extreme events observed, a significant increase of temperature on hotter and colder days was observed in some parts of West Africa. Even though little information is available to identify the trends, this implies an increase of the frequency of hot days in the future. It was also observed an increase in the drought periods in West Africa even though the 1970 drought in the Sahel dominates this trend. A higher inter-annual variability has also been observed more recently.

CLIMATE CHANGE PROJECTION IN WEST AFRICA

According to the IPCC[9], temperatures in West Africa will increase by 3°C and 6°C by the 21st Century based on the various scenarios. Models at regional level converge with the shift range indicated by global models. Whatever the scenarios, the Sahel and West Africa should be climate change hotspots ("bio-geographical zones with a wealth of biodiversity especially threatened by human activity"). Projections indicate that unprecedented climate changes will happen in this region by the end of the 2030s and the beginning of the 2040s.

Regarding projected precipitations, variations in the results of global models mean that confidence in the robustness of projections of changes in regional precipitations is "low to medium" in view of the lack of regional data. However, several global models indicate that the seasons of heavy rains are marked by delays in the beginning of the season by the end of the 21st Century.

The projection related to extreme events show that the risks of drought are inconsistent for West Africa. The results of the regional modelling however suggest an increase in intensity and frequency of extreme precipitation episodes, especially in highlands and mountain areas.

CLIMATE CHANGE IMPACT ON AGRICULTURE AND WATER RESOURCES IN WEST AFRICA

Agricultural production systems (multicropping and livestock production) in West Africa are among the most vulnerable in the world due to their reliance on rainfall, intra and interseasonal climate variability, droughts and floods that repeatedly affect crops and livestock and, the level of poverty in rural areas which restricts the adaptation capacity of farming and rural communities (Boko *et al*., 2007)[10]. Farming in West Africa will be faced with major challenges, namely the decline of main crops' yields (IPCC, 2014)[11]. The changes in cropping seasons will also affect production systems and crop potentials in some areas (Cook and VIZY, 2012)[12]. "Multicropping-livestock" systems could also evolve towards the preeminence of extensive livestock production due to shorter rainy seasons and the occurrence and succession of unfruitful farming seasons

[9] IPCC WGII AR5 Chapter 22, 2014

[10] Boko, M., I. Niang, A. Nyong, C. Vogel, A. Githeko, M. Medany, B. Osman-Elasha, R. Tabo, and P. Yanda, 2007: Africa. In: Climate Change 2007: Impacts, Adaptation and Vulnerability. Contribution of Working Group II to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change. [Parry, M.L., O.F. Canziani, J.P. Palutikof, P.J. van der Linden, and C.E. Hanson (eds.)]. Cambridge University Press, Cambridge, UK, pp. 433-467.

[11] IPCC WGII AR5 Chapter 22, 2014

[12] Cook, K.H. and E.K. Vizy, 2012: Impact of climate change on mid-twenty-first century growing seasons in Africa. Climate Dynamics, 39(12), 2937-2955.

(Jones and Thornton, 2009; Thornton *et al*., 2010)[13]. In several agroecological transition zones, livestock production could replace multicropping by the year 2050 (Jones and Thornton, 2009)[14].

In West Africa, temperature spikes higher than 2°C (based on a 1961-1990 reference) could also negatively affect the performance of modern cereal varieties contrary to the rustic traditional varieties (Sultan *et al*., 2013)[15]. In the short-term, an improved understanding and management of the impacts associated to climate change and variability could contribute significantly to strengthening agriculture's capacity to adapt to climate change (Washington *et al*., 2006[16]; Cooper *et al*., 2008[17]; Funk *et al*., 2008[18]).

In livestock production, climate changes will impact the availability and quality of fodder resources, access to water, animal species and races (heat stress and water needs), the mobility of livestock and epizooties (emerging and re-emerging diseases).

Concerning agricultural water in West Africa, climate changes will amplify the current stress related to water availability for agricultural production especially in semi-arid zones. The exact estimation of the influence of climate change on water resources in West Africa is limited by great uncertainty regarding climate models on the trend of precipitations. For example, Itiveh and Bigg (2008)[19] believe that in the future, precipitations will be higher in the Niger Basin (A1, A2 and scenarios B1), while Oguntunde and Abiodun (2013)[20] report a high seasonal variation with a decline in precipitations in the basin during the rainy season and an increase in rainfall during the dry season (scenario A1B). The Volta Basin should experience a slight average increase in rainfall (Kunstmann *et al*., 2008)[21]. In the areas receiving between 200 to 500 mm annually, namely in the Sahel (arid and semi-arid), climate changes could lead to a drop in

[13] Thornton, P.K., P.G. Jones, G. Alagarswamy, J. Andresen, and M. Herrero, 2010: Adapting to climate change: Agricultural system and household impacts in East Africa. Agricultural Systems, 103(2), 73-82.

[14] Thornton, P.K., J. van de Steeg, A. Notenbaert, and M. Herrero, 2009b: The impacts of climate change on livestock and livestock systems in developing countries: A review of what we know and what we need to know. Agricultural Systems, 101(3), 113-127.

[15] Sultan, B., P. Roudier, P. Quirion, A. Alhassane, B. Muller, M. Dingkuhn, P. Ciais, M. Guimberteau, S. Traoré, and C. Baron, 2013: Assessing climate change impacts on sorghum and millet yields in the Sudanian and Sahelian savannas of West Africa. Environmental Research Letters, 8(1).

[16] Washington, R., M. Harrison, D. Conway, E. Black, A. Challinor, D. Grimes, R. Jones, A. Morse, G. Kay, and M. Todd, 2006: African climate change: Taking the shorter route. Bulletin of the American Meteorological Society, 87(10), 1355-1366

[17] Cooper, P.J.M., J. Dimes, K.P.C. Rao, B. Shapiro, B. Shiferaw, and S. Twomlow, 2008: Coping better with current climatic variability in the rain-fed farming systems of sub-Saharan Africa: An essential first step in adapting to future climate change? Agriculture, Ecosystems and Environment, 126(1-2), 24-35.

[18] Funk, C., M.D. Dettinger, J.C. Michaelsen, J.P. Verdin, M.E. Brown, M. Barlow, and A. Hoell, 2008: Warming of the Indian Ocean threatens eastern and southern African food security but could be mitigated by agricultural development. Proceedings of the National Academy of Sciences of the United States of America, 105(32), 11081-11086.

[19] Itiveh, K.O. and G.R. Bigg, 2008: The variation of discharge entering the Niger Delta system, 1951-2000, and estimates of change under global warming. International Journal of Climatology, 28(5), 659-666.

[20] Oguntunde, P.G. and B.J. Abiodun, 2013: The impact of climate change on the Niger River Basin hydroclimatology, West Africa. Climate Dynamics, 40(1-2), 81-94.

[21] Kunstmann, H., G. Jung, S. Wagner, and H. Clottey, 2008: Integration of atmospheric sciences and hydrology for the development of decision support systems in sustainable water management. Physics and Chemistry of the Earth, 33(1-2), 165-174.

groundwater recharge, especially in shallow aquifers due to recurring and protracted droughts (Barthel *et al*., 2009)[22].

OPTION TO ENHANCE RESILIENCE OF AGRICULTURE TO CLIMATE CHANGE TO SUPPORT FOOD SECURITY IN WEST AFRICA

To meet the challenge of adapting agriculture to climate change and strengthening the resilience of rural populations in West Africa, the promotion and development of a climate-smart agriculture is an opportunity. In this perspective, the Research programme of the Consultative Group for Agricultural Research (CGIAR) on climate change, agriculture and food security (Zougmoré R. *et al*., 2015)[23] and the West African Alliance for the implementation of the Intervention Framework for the Development of Climate-Smart Agriculture (June, 2015)[24] under the West Africa Regional Agricultural Policy (ECOWAP/CAADP) have identified a range of concrete actions, including:

- At regional level, facilitate the improved capitalization-dissemination of best practices in the area of Climate change adaptation and develop public policy tools to facilitate scaling up;
- Develop and implement climate change adaptation strategies for agriculture anchored in the agro-ecological realities related to agricultural systems;
- Strengthen the capacity of rural institutions and key stakeholders in actively using information on climate and adaptation for local development planning; develop seeds that are resistant to high temperatures and resilient;
- Scale up irrigation techniques and water harvest and conservation techniques;
- Promote agroforestry;
- Improve seasonal meteorological forecasts and facilitate their dissemination to producers;
- Promote alternative crops that are more resilient to climate change;
- Further integrate farming and livestock production;
- Etc.

Several regional and international organizations (CILSS, ENDA, IED Afrique, IUCN, etc.) have conducted studies and actions in several West Africa countries that highlight some best practices and technologies related to climate change adaptation in agriculture (see section 2.1). At the production level, best agricultural practices are the practices that increase productivity and hence competitiveness, while simultaneously allowing to maintain and improve management of natural resources, including services provided by ecosystems and biodiversity

[22] Barthel, R., B.G.J.S. Sonneveld, J. Götzinger, M.A. Keyzer, S. Pande, A. Printz, and T. Gaiser, 2009: Integrated assessment of groundwater resources in the Ouémé basin, Benin, West Africa. Physics and Chemistry of the Earth, 34(4-5), 236-250.

[23] Robert Zougmoré, Alain Sy Traoré et Yamar Mbodj (Eds.), 2015. Paysage scientifique, politique et financier de l'Agriculture Intelligente face au Climat en Afrique de l'Ouest. Document de Travail No. 118. Programme de recherche du CGIAR sur le Changement Climatique, l'Agriculture et la Sécurité Alimentaire.

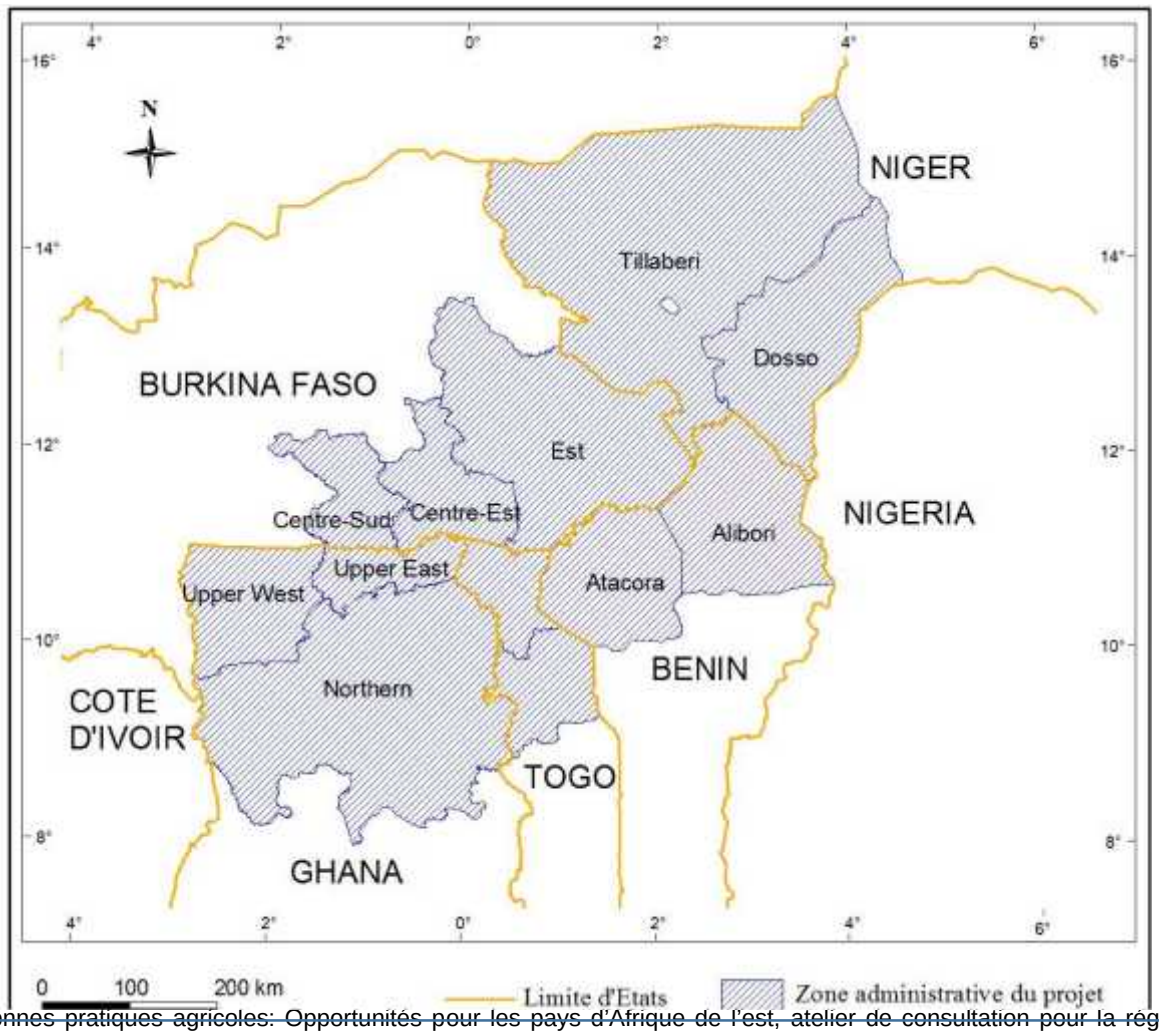
[24] Intervention Framework for the Development of Climate-Smart Agriculture under the implementation process of the West Africa Regional Agricultural Policy (ECOWAP/CAADP)

in a specific agro-ecological zone[25]. The best practices related to climate change adaptation in agriculture allow to reduce the vulnerability of agricultural production systems face to climate change and strengthening the resilience of rural communities in addition.

However the scaling up of these best practices related to climate change adaptation in agriculture is limited due to insufficient resources and the characteristics of family farming in the sub-region. The capitalization and scaling up of these practices are the challenge that will be addressed by this project.

TARGET AREAS AND BENEFICIARIES

The project "Promoting Climate-smart agriculture in West Africa" is to be implemented in the eastern, east-central, and south-central regions of Burkina Faso; in the southern parts of the Tillabery and Dosso region of Niger; in the Alibori and Atacora regions of Benin, in the Savanah and Kara regions of Togo and in the Northern-East, North-West and Northern regions of Ghana, that is, a surface area of 355,158 km^2 for a population of about 15,658,772 inhabitants.



[25] Bonnes pratiques agricoles: Opportunités pour les pays d'Afrique de l'est, atelier de consultation pour la région d'Afrique de l'est organisé à Arusha, Tanzanie, du 16 au 21 juin 2008, par la Division de production et protection végétale, Organisation des Nations Unies pour l'Agriculture et l'Alimentation (FAO).

The project will be implemented in a geographical area covering the agroecological subhumid zones in the south, the subhumid/semi-arid transition zone and the semi-arid zone in the north. Agriculture is the main source of income for populations in the project area. This is also a major internal and external transhumance zone for livestock. The transportation of goods and persons is also very important along the corridors (Niamey/Cotonou, Niamey/Lomé, Niamey/Tema, Ouagadougou/Cotonou, Ouagadougou/Lomé, Ouagadougou/Tema) that pass through this zone. Moreover, numerous nature parks and reserves are found in the area of the project, namely, the W National Park in the middle of a transboundary nature complex of 1,000,000 ha co-managed by Benin, Niger and Burkina Faso, and the Pendjari Biosphere Reserve (RBP) which stretches over 480,000 ha.

Over 3,395,263 individuals living in rural areas in the project implementation zone will be its indirect beneficiaries in terms of improving their food and nutrition security and their income level. More specifically, at the end of the project, **more than 500,000 persons** would have benefited directly from having technical, physical and operational capacity strengthened. These include:

- More than 200,000 farmers and over 300,000 breeders (around 200,000 women) in the project implementation zone in Benin, Togo, Ghana, Niger and Burkina Faso;
- Over 600 producers and pastoralists organizations in the project implementation zone in Benin, Togo, Ghana, Niger and Burkina Faso;
- More than 1,600 technicians and supervisory agents from the ministries in charge of agriculture, livestock, environment, forestry and water in the project implementation area in Benin, Togo, Ghana, Niger and Burkina Faso.
- Over 1,000 executives and agents from the Local Community and local administration in the project implementation area in Benin, Togo, Ghana, Niger and Burkina Faso;
- More than 30 research institutions specialized in issues related to adapting agriculture to climate change in the project implementation area in Benin, Togo, Ghana, Niger and Burkina Faso;
- Over 50 Non-Governmental Organizations and Community-based organizations engaged in rural and agricultural development in the project implementation area in Benin, Togo, Ghana, Niger and Burkina Faso;
- The community of stakeholders involved in combatting climate change in West Africa.

PROJECT'S ADDED VALUE AND SYNERGY IN RELATION TO OTHER INITIATIVES IN THE COUNTRY

Through its regional and transboundary scope of action, areas of intervention (plant production and livestock production) and approach (scaling up of best practices on climate change adaptation in agriculture) and knowledge and experience sharing and production, the project has a significant replication potential in West Africa and even in other Africa regions. Regional approaches are not very common but are very important and relevant for climate change adaptation in particular. In West Africa in particular, the regional approach has been endorsed by the West African Alliance for CSA in June 2015 (Bamako, Mali) and it fits into a logic of pooling and complementarity of interventions.

Synergies will be implemented between the project and ongoing regional climate change adaptation programmes in the ECOWAS/UEMOA zones:

- The Project to strengthen the investment capacity in agriculture and climate change of 15 West African countries, led by ECOWAS, funded by NEPAD/Climate Fund;
- The Strategic Programme for reducing vulnerability and promoting climate adaptation in WA, led by ECOWAS and funded by Sweden;
- The projects funded by the European Union in the context of the 11th EDF the intervention themes of which are being defined;
- The Special Programme for Food Security in UEMOA funded by BOAD.

At the regional level, complementarities will be developed with the "Regional Projects to support Pastoralism in the Sahel (PRAPS, a project funded by the World Bank) covering Burkina, Mali, Mauritania, Niger, Senegal and Chad and implemented by the CILSS and the beneficiary countries. This proposal project will seek synergies and complementarity by covering costal countries (Togo, Ghana and Benin) not covered by PRAPS but where issues related to climate change and pastoralism are very critical. Transhumant corridors covers Sahelian and costal countries and a regional approach to address climate change and pastoralism in all involved countries is key.

At the level of beneficiaries' countries, complementarities and synergies will be developed with, among others:

- The agricultural chapter of national adaptation action programmes;
- The project Community-based actions for Climate resilience (PACRC) with the objective of "improving the protection of populations and production systems against climate change and variability in the targeted communes" implemented since 2012 in 2017.
- Strategic Programme for Climate Resilience (PSRC) in Niger, funded by African Development Bank (AfDB);
- The Project to support climate change-sensitive agriculture (PASEC), funded by the World Bank;
- The proposal project for Enhancing Resilience of Agriculture to Climate Change to Support Food Security in Niger, through Modern Irrigation Techniques submitted by BOAD to the adaptation fund
- Etc.

A detailed and comprehensive mapping of all projects and programme related to climate change adaptation in agriculture will be realized to highlight synergies with other initiatives in the country.

1.2. PROJECT / PROGRAMME OBJECTIVES

The overall objective of the project is to contribute to developing climate-smart agriculture in West Africa especially in terms of adaptation in order to strengthen the resilience of vulnerable populations.

The specific objectives are 1) the dissemination of best practices, 2) the mainstreaming of climate change adaptation in agriculture in strategies, plan and projects and 3) the knowledge management related to climate change adaptation in agriculture within a transboundary zone with agro-ecological coherence in terms of vulnerability. The strategic framework is indicated in the box below:

Component 1: Dissemination of agricultural best practices related to climate change adaptation at local level

Effect 1.1: Climate change adaptation in agriculture techniques and practices improved and adopted by producers

- Output 1.1: Climate services (agroclimatic, meteorological information, etc.) adapted to the needs of each category of producers are produced and disseminated.
- Output 1.2: The catalogue of existing climate change and variability adaptation expertise, techniques and practices in the target sites is completed.
- Output 1.3: Dissemination of agricultural best practices for climate change adaptation and related to extension services are improved and adopted by actors of the value chains.

Component 2: Mainstreaming agricultural best practices related to climate change adaptation in strategies/policies/projects

Effect 2.1. Resources mobilized and allocated to the dissemination of best practices related to adaptation to climate change are increased.

- Output 2.1.1: The technical capacity of a critical mass of field operators (NGOs, cooperatives, extension services) is strengthened to promote agricultural best practices related to climate change adaptation.
- Output 2.1.2: The technical capacity of national and regional managers and experts in charge of designing and implementing projects and programmes is strengthened to mainstream best practices related to adaptation to climate change.

Effect 2.2. Synergies and complementarities between regional and national projects on best practices related to adaptation to climate change are implemented and strengthened

- Output 2.2.1: Transboundary collaboration for adaptation to climate change in agriculture is strengthened;
- Output 2.2.2: the capacity of national and regional executives is strengthened on community and international policy, regulatory and legal frameworks (UEMOA, ECOWAS) related to the adaptation of agriculture to climate change.

Component 3: Management of knowledge on agricultural best practices related to climate change adaptation

Effect 3.1: Knowledge on agricultural best practices related to climate change adaptation is strengthened and disseminated.

- Output 3.1: Action-Research activities on agricultural techniques and practices for climate change adaptation taking into account current and future scenarios are realized and validated with producers.
- Output 3.2: The sharing of experiences and expertise on agricultural best practices related to climate change adaptation is strengthened.

1.3. PROJECT / PROGRAMME COMPONENTS AND FINANCING:

Project/ Programme Components	Expected Outcomes	Expected Outputs	Activities/ allocated budget	Countries/ components allocation (US$1,000)	Amount (US$1,000)
Component 1: Dissemination of agricultural best practices related to climate change adaptation at local level	1.1. Climate change adaptation techniques and practices improved and adopted by producers.	1.1.1. Climate services (agroclimatic, meteorological information, etc.) adapted to the needs of each category of producers are produced and disseminated.	1.1.1.1. strengthen climatic and meteorological observation networks in	***Benin (1,500)*** ***Burkina Faso (2,000)*** ***Niger (2,000)*** ***Togo (1,500)*** ***Ghana (2,000)***	100
			1.1.1.2. Support the collection, processing and analysis of meteorological data		100
			1.1.1.3. Organize meetings to exchange on meteorological forecasts for agricultural campaigns		100
			1.1.1.4. Produce and disseminate agro-meteorological information for the attention of producers (newsletters, MIS, telephones, mobiles, community radio, local languages)		100
		1.1.2. The catalogue of existing climate change and variability adaptation expertise, techniques and practices in the target sites is completed.	1.1.2.1. Take stock of practices and techniques related to climate change adaptation in agriculture in Benin, Togo, Niger, Burkina Faso and Ghana		100
			1.1.2.2. Characterize and assess best practices and techniques related to climate change adaptation in agriculture that could be scaled up		100
			1.1.2.3. Develop and operationalize a dynamic database of best practices and techniques related to climate change adaptation in agriculture		100
			1.1.2.4. Produce and disseminate the catalogue of best practices and techniques related to climate change adaptation in agriculture		100
		1.1.3. Dissemination of agricultural best practices for climate change adaptation and related to extension services are improved and adopted by actors of the value chains.	1.1.3.1. support water management and conservation		3,200
			1.1.3.2. support soil rehabilitation and conservation		2,500
			1.1.3.3. support livestock mobility and crossborder transhumance		2,500
Sub-total				***9,000***	**9,000**
Component 2: Mainstreaming agricultural best practices related to climate change adaptation in strategies/policies/projects at national and regional levels	2.1. Resources mobilized and allocated to the dissemination of best practices related to adaptation to climate change are increased.	2.1.1. The technical capacity of a critical mass of field operators (NGOs, cooperatives, extension services) is strengthened to promote agricultural best practices related to climate change adaptation.	2.1.1.1. Train the technicians of producers and breeders' organizations (PBOs) and their members and NGOs in the agricultural sector on climate change adaptation in agriculture	***Benin (250)*** ***Burkina Faso (250)*** **Niger (250)** **Togo (250)** **Ghana (250)**	150
			2.1.1.2. Train the technicians of POs and NGOs on climate change adaptation in agriculture project formulation and resources mobilization related to climate change adaptation in agriculture		150
		2.1.2. The technical capacity of national and regional managers and experts in charge of designing and implementing projects and programmes is strengthened to mainstream best practices related to adaptation to climate change.	2.1.2.1. Train the executives and technicians of decentralized and local structures in climate change adaptation in agriculture plans and projects formulation and in resource mobilization related to climate change adaptation in agriculture		150
			2.1.2.2. Support the mainstreaming of climate change adaptation in agriculture at the subnational local collectivities development plans in Burkina Faso (3), Niger (2), Benin (2), Togo (2) and Ghana (3).		500

Project/ Programme Components	Expected Outcomes	Expected Outputs	Activities/ allocated budget	Countries/ components allocation (US$1,000)	Amount (US$1,000)
	2.2. Synergies and complementarities between regional and national projects on best practices related to adaptation to climate change are implemented and strengthened.	2.2.1. Transboundary collaboration for the adaptation of agriculture to climate change is strengthened	2.2.1.1. Establish and operationalize a regular forum for exchanging and sharing experiences on climate change adaptation in agriculture between the neighboring administrative regions of Burkina Faso, Niger, Benin, Togo and Ghana.		100
			2.2.1.2. organize of exchange tours and training on climate change adaptation in agriculture for the benefit of executives and technicians		100
		2.2.2. The capacity of national executives are strengthened on community and international policy, regulatory and legal frameworks (UEMOA, ECOWAS) in relation with climate adaptation in agriculture	2.2.2.1. Train on policy, regulatory, community frameworks and on international conventions related to climate change adaptation in agriculture		100
Sub-total				**1,250**	**1,250**
Component 3: Management of knowledge on agricultural best practices related to climate change adaptation	3.1. Knowledge on agricultural best practices related to climate change adaptation is strengthened and disseminated.	3.1.1. Action-Research on agricultural techniques and practices for climate change adaptation taking into account current and future scenarios are realized and validated with producers.	3.1.1.1. Capitalize on the Research results related to climate change adaptation in agriculture.	**Benin (250) Burkina Faso (250) Niger (250) Togo (250) Ghana (250)**	550
			3.1.1.2. Produce knowledge about trend, rainfall and thermometric variability in the project zone		350
		3.1.2. The sharing of experiences and expertise on agricultural best practices related to climate change adaptation is strengthened.	3.1.2.1. Establish and operationalize a network of exchange between stakeholders of agriculture adaptation, including public agencies, local communities, POs and NGOs in Niger, Benin, Togo, Ghana and Burkina Faso.		200
			3.1.2.2. Produce and disseminate newsletters and journals to capitalize on the climate change adaptation in agriculture activities		150
Sub-total				***1,250***	***1,250***
Monitoring-Evaluation and Capitalization					***250***

Project/programme Execution Cost	**1118**
Total Project/Programme Cost	**12,868**
Cycle Management Fee charged by Implementing Entity (8.5% x Total Project/Programme Cost)	**1,132**
Amount of Financing Requested	**14 00**

1.4. PROJECTED CALENDAR:

The project duration is three and half (3.5) years

Milestones	Expected Dates
Start of Project/Programme Implementation	July 2017
Mid-term Review (if planned)	December 2018
Project/Programme Closing	December 2020
Terminal Evaluation	January 2021

PART II: PROJECT / PROGRAMME JUSTIFICATION

2.1. PROJECT DESCRIPTION

The promotion of climate-smart agriculture in West Africa in the context of the project will be done using 3 components.

Component 1 will be devoted to the **Dissemination of best practices related to climate change adaptation in agriculture at local level**. The adoption of best practices and techniques related to climate change adaptation by producers will be realized by achieving the following 3 outputs:

Output 1.1.: Climate services (agroclimatic, meteorological information, etc.) adapted and specific to the needs of producers in the project area will be produced and disseminated.

1.1.1.1. strengthen climate and meteorological observation networks.

Since the mechanism for observing climate parameters in the project regions is currently incomplete, obsolete or out-of-date, it will be 1) strengthened by the procurement and installation of direct-reading rain gauges, 2) completed with the acquisition of thermo-anemometer recorders, and 3) equipped with densified grid extended to cover all the communes of the project.

1.1.1.2. Support the collection and analysis of meteorological data

Since the technical and physical capacity for the collection and analysis of meteorological data at regional level is limited, specific training sessions will be organized for technicians in the Regional Directorates in charge of agriculture, livestock and environment, water and forests. Computer equipment will be acquired to facilitate data processing, create an online database and facilitate its access via the internet.

1.1.1.3. Organize meetings to exchange on meteorological forecasting for agricultural campaigns

The results of the analysis of meteorological parameters will be presented and discussed during sessions that will include producers' organizations. These exchanges will enable to strengthen the dialogue between modern climate monitoring and analysis approaches and endogenous knowledge and strategies on climate, and to identify appropriate and shared responses among stakeholders of the agricultural sector. This approach is innovative in term of designing climate change adaptation strategy in agriculture at local level in West Africa.

1.1.1.4. Produce and disseminate agro-meteorological information for producers

A summary of the conclusions and recommendations related to meteorological forecasts will be produced, translated in a language accessible (local languages, sound messages, etc.) to the greater number and broadcasted through appropriate media channels (weather forecasts in the media, PO networks, telephone, community radio, etc.)

These activities will enable to increase the production of climate data, to improve local monitoring of climate data, to strengthen the technical capacity in agro-meteorology, to strengthen knowledge sharing on the climate and to improve the provision of climate services for the benefit of producers, especially the most vulnerable. These activities will also strengthen the production and quality of the primary climate data for the regional meteorological and climatic network in West Africa.

Output 1.2.: The catalogue of existing climate change and variability adaptation expertise, techniques and practices in the target sites is completed

1.1.2.1. Take stock of practices and techniques related to climate change adaptation in agriculture in Benin, Burkina Faso and Ghana, Niger Togo,

The techniques, technologies, approaches and initiatives that exist or are being developed or implemented in response to the challenges of adapting to climate change in the ECOWAS region, will be identified and documented. Agriculture, livestock, natural resources management, water resources management will be covered by the scope of this inventory. The information collected and the database thus produced will be made available to all the stakeholders of the fight against climate change. This activity will be supported by field missions in the project beneficiary countries.

1.1.2.2. Characterize and assess of best practices and techniques related to climate change adaptation in agriculture that could be scaled up

Among the practices identified, those with a significant potential for the adaptation of agriculture to climate change, will be assessed based on economic, social and environmental criteria and characterized. This characterization will be conducted while taking into account the constraints related to agro-ecological zones, to local agricultural systems and to the economic and social environment of the project beneficiary countries.

1.1.2.3. Develop and operationalize a dynamic database of best practices and techniques related to climate change adaptation in agriculture

The practices documented and best practices characterized will be fed into a database accessible to all and will be updated every year. Setting up a georeferenced mapping tool showing climate change techniques and practices is an interesting practical and innovative way of presenting information.

1.1.2.4. Produce and disseminate the catalogue of best practices and techniques related to climate change adaptation in agriculture

The catalogue of best practices and techniques related to climate change adaptation in agriculture obtained will be disseminated annually in an appropriate format for each of the potential stakeholders (Public administrations and technical services, Producers' organizations, local community, students, etc.).

The knowledge related to good climate adaptation practices in agriculture in West Africa will thus be improved and made available and accessible to all the stakeholders of agricultural development in the ECOWAS region and in the world.

Output 1.3.: Dissemination of agricultural best practices for climate change adaptation and related to extension services are improved and adopted by actors of the value chains

A wide range of techniques and practices (listed in the Table below) identified in the project implementation areas have a significant potential in terms of climate change adaptation in agriculture. However, the adoption and the implementation of most of these techniques and practices remain isolated and limited.

Table 1: some promising practices and techniques related to climate change adaption in agriculture production

1. Soil management	**5. Livestock systems**
Stone bunds	Traditional practice of livestock mobility and transhumance
Permeable rock dams	Progressive settling and reconversion of pastoralists
Grassy strips	Strengthening the monitoring of the area and animals
Zaï	Reconstitution of the flock
Half-moons	Destocking of animals
Mulching (mulch or stems layering)	Redefining the modalities of the folding contract and the constitution of fodder stocks
Dune fixation (stop lines and tying with millet stalks)	Improvement of zootechnical performance through fattening
Improved fallow	**6. Water management**
Subsoiling	Micro-irrigation with "Koglogo" pans
Deferment	Surface irrigation water-saving systems
Lowlands management	Micro drip irrigation systems
2. Forestry and agroforestry	Construction of impoundments : dams, rock rubble, detention basin
Assisted Natural Regeneration	Construction of impluviums

(ANR)	
Reforestation	Mobilization of water through tube wells
Windbreaks	Irrigation brigades
Practice of alley-cropping	**7. Inputs and cropping techniques**
Fixation of shorelines	Improved seeds
Forest management	Flat plowing
Arboretums and botanic conservatories	Soil scarification
3. Pastoral hydraulics	Restoration of degraded lands through subsoiling
Protection of water points against sanding up	Composting
Realization of high-capacity boreholes equipped with solar pumps	Mixed cropping
Overdeepening of natural ponds	Off-season crops ; crop diversification
4. Pastoral resources management	**8. Animal feed**
Demarcation of pastoral zones or pastoral areas for special management	Run fattening and organic manure production stables
Demarcation and markup of cattle tracks and transhumance	Cutting and conservation of fodder
	Fodder crops

The systematic scaling up of some of these techniques and practices in the project zone is faced with challenges such as the high cost of implementation, the difficulties in adopting them due to the current peculiarities of prevailing production systems (access to inputs, land, level of mechanization, availability of local agricultural labor, fragmentation and dispersion of agricultural land, etc.) and the current characteristics of cropping systems (plant production, livestock, integration level of crop-livestock system).

In the context of the project, techniques and practices with the best cost-efficiency ratio and a significant effect on the most vulnerable populations (especially women) and that are likely to have significant impacts on a greater number of producers and breeders in the project implementation area will be prioritized.

1.1.3.1. Support water management and conservation

The availability of agricultural water for plant productions and livestock production is increasingly difficult due to climate change and variability. The recurrence and length of drought pockets are also greater. The water deficit thus generated considerably affects crop and farmers' productivity in the project zone. To reduce the vulnerability of these farmers, water conservation works will be conducted and water conservation techniques will be disseminated. More specifically, based on the characteristics of the sites, there will be a need to:

1) realize 600 runoff water harvest basins;
2) realize the overdeepening of 180 ponds;

3) Dig 60 large-diameter wells;
4) Operationnalize 240 mobile irrigation units, which is an innovation response to the unexpected dry period. These units include a driver/mechanic and a person in charge of irrigation and are equipped with a motor tricycle with a mechanism adapted to the transportation of materials and persons, a motor pump and mobile flexitubes. These units will provide services on demand.

1.1.3.2. Support soil restoration and conservation

The increased intensity of rainfall and their density in time and space, and the recrudescence of climate change-induced violent winds increasingly exacerbate the already advanced degradation of soils caused by erosion on large surfaces in the project zone. To curb this phenomenon that especially affects the most vulnerable populations and restore already degraded soils, support will be provided to producers to put in place the following techniques which are labor and work intensive.

1. Stone bunds, permeable rock dams and grassy strips over 2,400 ha;
2. Zaï or tassa, assisted natural regeneration and half moons over 2,400 ha.

These techniques will be combined if necessary based on the capacity and characteristics of the sites in order to optimize their potential. Also, organic manure will be obtained from local livestock producers to improve soil fertility.

1.1.3.3. Support livestock mobility and crossborder transhumance

By affecting the availability of pastures and water, climate change forces pastoralists to adopt internal and external transhumance as an adaptation and survival strategy. Transhumance practiced in an environment already marked by fierce competition to access resources, generates recurrent and increasing conflicts between pastoralists and farmers. Moreover, in an area characterized by different lifestyles, specific regulations on transhumance and uncoordinated animal health policies, these conflicts often lead to disastrous consequences (loss of livestock and human life, resurgence of zoonoses) especially in the “grey” zones (transboundary areas). To both support livestock producers’ adaptation strategies and facilitate interactions with farming communities installed in the project implementation zone, activities will be implemented to improve livestock mobility and crossborder transhumance. More specifically, there will be a need to:

1. Demarcate, markup and secure 1,800 km of transboundary transhumance corridors or tracks;
2. Produce 100 water points and 30 boreholes along the secured transhumance corridors.

The incentives created by the grants awarded for the implementation of good adaptation practices of agriculture to climate changes will facilitate the transition of farms and rural communities towards climate-resilient producer systems.

Component 2 involves mainstreaming good climate change adaptation practices in national and sub-regional agricultural strategies and projects. Two outputs with major impacts through their activities will contribute to this component.

The first outcome for the component *2.1*. Improvement of the mobilization of resources allocated to the dissemination of good climate change adaptation practices in agriculture will be realized through the following outputs.

Output 2.1.1.: The technical capacity of a critical mass of field operators (NGOs, cooperatives, extension services) is strengthened to promote agricultural best practices related to climate change adaptation in agriculture. The activities planned will be conducted in the 12 zones of the project.

2.1.1.1. Train technicians of producers' and breeders' organizations (PBOs) and their members and NGOs in the agricultural sector on climate change adaptation

The adaptation of agriculture to climate change requires new skills and calls for PBOs and NGOs of the agricultural sector to increase, renew and strengthen the services to be provided to their members and beneficiaries. However, the current capacity for implementing concrete adaptation actions for PBOs and NGOs, especially at local level, remain limited. Capacity strengthening sessions for PBOs and NGOs in the project implementation zone will be organized. They will specifically focus on the need of practitioners and will analyze the challenges related to water, soil, energy in rural areas, genetic resources and the dissemination of good agricultural practices along the value chains, agroforestry, fisheries and aquaculture.

2.1.1.2. Train the technicians of PBOs and NGOs in formulating CSA projects and mobilizing financing related to climate change adaptation in agriculture

The implementation of concrete adaptation actions will require the formulation of climate change adaptation in agriculture-sensitive projects and the implementation of resources mobilization strategies at local, national and international levels. The related skills are actually limited in the PBOs and NGOs, especially at local level. Training sessions on the formulation of projects on climate adaptation in agriculture and on climate fundraising will be organized to that effect on behalf of Producers' organizations and NGOs.

The PBOs and NGOs play an increasingly important role in agricultural and local development due to their proximity with the beneficiaries and the most vulnerable populations, and their knowledge of the situation on the ground. These activities will enable them to contribute more efficiently to adapting agriculture to climate change, especially at local and West Africa region level.

Output 2.1.2.: The technical capacity of national and regional managers and experts in charge of designing and implementing projects and programmes is strengthened to mainstream best practices related to climate change adaptation in agriculture.

2.1.2.1. Training of executives and technicians of decentralized and local structures on the formulation of climate change adaptation in agriculture plans and projects and on fundraising in relation to the adaptation of agriculture to climate change.

The adaptation of agriculture to climate change requires new skills and calls for regional and departmental ministerial directorates in charge of agriculture, livestock, environment, water and forests, and the local community, to define and provide new interventions, and also to develop new resources mobilization strategies. However, the current capacity in the area remains limited at local level. Training sessions on the formulation of regional adaptation plans and projects for the adaptation of agriculture to climate change and on climate-fundraising, will be organized to that effect for the benefit of executives and technicians at the decentralized and local structures.

2.1.2.2. Support the mainstreaming of climate change adaptation in agriculture in subnational local collectivities development plans in Burkina Faso, Niger, Benin, Togo and Ghana. At the local level, the climate change adaptation in agriculture necessarily fits into the subnational local collectivities development policy and in an interaction with the other dimensions of rural development. However, very few existing regional development plans integrate this dimension using an intersectoral approach. The mainstreaming process of regional development plans in the project implementation zone will be carried out under the leadership of local communities as needed. Training sessions on the creation of a development strategy focused on institutional options, policies, financing, disaster risk reduction and social security nets, the development of institutional capacity and monitoring-evaluation will be organized in parallel in favor of local community leaders.

The sustainability of the project activities is based on the ownership, increased involvement, knowledge and skills transfer, and a strengthening of institutional capacity at all levels of interventions, especially for decentralized and local structures and subnational local collectivities. These activities will contribute to capacity building of key local agriculture stakeholders in the area of intervention of the project.

The second outcome for this component 2.2 **Strengthening synergies and complementarities in the implementation of regional and national climate adaptation in agriculture** will be realized through the following outputs.

Output 2.2.1.: Transboundary collaboration for the adaptation of agriculture to climate change is strengthened.

2.2.1.1. Establish and operationalize a regular framework of experience exchange and sharing, and consultation on climate change adaptation in agriculture between the neighboring administrative regions of Burkina Faso, Niger, Benin, Togo and Ghana.

On both sides of borders in the neighboring administrative regions of the South-Central, East-Central and Eastern parts of Burkina Faso, of Tillabéry and Dosso in Niger, of Alibori and Atacora in Benin, of the Savannah and Kara in Togo, and the Northern, North-Eastern and North-Western regions in Ghana, the local actors of the climate change adaptation in agriculture are faced with often very similar common realities, constraints and challenges. However, no formal or informal framework of exchange currently exists to enable them share their experiences and knowledge in order to develop concrete, efficient and coherent and coordinated responses. A formal framework of exchange will be put in place with periodic meetings gathering executives from the Ministries in charge of agriculture, livestock, environment, water and forests,

local communities and subnational local collectivities. This framework will enable to address issues related to the effects of climate changes on agricultural production systems (value chain, crops, etc.) transhumance in livestock production, the sustainable management of shared water resources and the management of shared protected areas.

2.2.1.2. Support the organization of exchanges tours and training sessions on climate change adaptation in agriculture for the benefit of executives and technicians

Due to the existence of the administrative border between the Central-south, Central-East and Eastern regions in Burkina Faso, Tillabéry and Dosso in Niger, Alibori and Atacora in Benin, Savannahs and Kara in Togo, and the Northern, Northern-East and Northern-West regions of Ghana, the executives and technicians are very poorly informed of the strategies and interventions implemented from country to country, especially those affected in northern regions. Study tours and common training on climate change adaptation in agriculture will be organized to improve the technical and operational dialogue between technicians of these transboundary regions. Aspects such as policy and regulatory frameworks, collaboration with technical and financial partners, transhumance, will be prioritized for these activities.

Beyond the administrative and border dimensions, farming systems in the project zone are faced with various, albeit shared, challenges due to the relative cultural, agroecological, social and economic unity. These activities will contribute to developing a collective conscience, to pool the knowledge and to strengthen the coordination of actions in order to adapt agriculture to climate changes at local level. This activities will strengthen the “regional thinking” on climate change adaptation in agriculture.

Output 2.2.2.: The capacity of national executives will be strengthened on community and international policy, regulatory and legal frameworks (UEMOA, ECOWAS) related to the adaptation of agriculture to climate change. The activities planned are as follows.

2.2.2.1. Training on the policy, regulatory, community frameworks and on the international conventions on climate change adaptation in agriculture

The implementation of concrete actions to climate change adaptation in agriculture requires interactions and synergy between regional, national, and local actors in order to improve their collective efficiency. Unfortunately, local actors are not really familiar with policy, regulatory, community frameworks and international conventions related to the climate change. Training sessions on these frameworks will be organized for stakeholders of the agricultural sector in the project implementation zones. Local actors will also get acquainted with the regional programmes and projects and the ongoing regional initiatives in the ECOWAS/UEMOA region related to climate adaptation in agriculture during these sessions.

More than ever, it is necessary to strengthen the links between actions aiming to climate change adaptation in agriculture initiated at regional level with those implemented at local level. These activities are planned to initiate interactions to that effect and create a dynamics of mutual capacity strengthening.

Component 3 is the management of knowledge on best practices in adapting agriculture to climate changes. Two main outcomes will contribute to this component through their activities.

The outcome expected of this component is the **improvement of knowledge on good practices of adapting agriculture to climate change and their dissemination**. It will be carried out through the achievement of the outputs below. The activities planned will mostly be conducted in the regions covered by the project, however the dissemination will be extended to the entire ECOWAS region.

Output 3.1.: Action-Research on agricultural techniques and practices for climate change adaptation taking into account current and future scenarios are realized and validated with producers.

3.1.1.1. Capitalize on the Research results activities related to climate change adaptation in agriculture.

The scaling up of good climate adaptation practices in agriculture is in most cases faced with constraints related to, among others, the land tenure situation of farms, the low level of agricultural mechanization, the limited investment and financing capacity, adoption capacity, marketing challenges, the quality of rural infrastructures, etc. The research results related to climate change adaptation in agriculture value chains (food crops and export crops) in the project implementation zone will be documented and disseminated through calls for proposals.

3.1.1.2. Produce knowledge about trends of rainfall and thermometric variability in the project zone

The improvement of agro-meteorological forecasts related to the phenology of plant and animal productions represents a challenge in strengthening climate adaptation capacity, especially at local level. In view of the limited technical capacity in the project implementation areas, activities 1) to analyze trends of climatic parameters (temperature and rainfall) and 2) mapping the trend of temperature and rainfall will be carried out in relation with the structures in charge of meteorology. As such, this activity is designed to be a pilot-activity due to its complexity and the technical and scientific constraints to be overcome.

Research-action is a pillar of climate change adaptation in agriculture in view of the scope and complexity of the issues yet to be resolved, especially in the most vulnerable rural areas. These activities will contribute to boosting a closer collaboration between knowledge development and concrete on the ground agriculture activities to reach farmers' expectations. This activity will also contribute to improve knowledge about trends and projection of climate change in West Africa. To insure the regional dimension, the activities indicated above will be implemented by a specialized regional organization.

Output 3.2.: The sharing of experiences and expertise on agricultural best practices related to climate change adaptation is strengthened

3.1.2.1. Establish and operationalize a network of exchange among the actors of climate adaptation in agriculture including the public agencies, local communities, PBOs and NGOs in Benin, Burkina Faso, Ghana, Niger and Togo.

The dissemination of knowledge, mobilization of all the key expertise, the sharing of experience and expertise, the combination of approaches and the plurality of scales of action and the synergy and complementarity of initiatives are major drivers in defining strategies anchored in the territories and the implementation of concrete and efficient activities for climate adaptation. In this vein, in the context of the Alliance on climate-smart agriculture in West Africa, a virtual platform of exchange on agriculture adaptation to climate change will be established and facilitated by the project. The documentation produced in relation with climate changes will be made available to all and regular online discussions will be conducted via the platform. A summary of the discussions and success stories will be published annually on the platform.

3.1.2.2. Produce and disseminate newsletters and journals to capitalize on the climate change adaptation in agriculture activities

The sharing of knowledge and enhancement of the channel of dissemination – the community of stakeholders involved in climate change adaptation actions in agriculture – and efficient communication are major areas for the development of climate-smart agriculture. Information and capitalization materials will be produced and disseminated on a regular basis to fill the gap of related varied and specific data and information.

The capitalization of climate adaptation actions in agriculture in the ECOWAS/UEMOA region will enhance the quality of the actions initiated and will foster scaling up of technologies and best practices related to climate change adaptation in agriculture.

2.2. PROJECT BENEFITS

The many benefits expected from the implementation of this project will be economic, environmental and social.

At environmental level. The pressure on natural resources (water, forests, protected areas and soil) in an already fragile environment will be reduced through the adoption of more sustainable farming practices (soil restoration and conservation, demarcation of transhumance corridors) and improved water management and intensified dialogue between stakeholders in the agricultural sector in the project implementation zone. Moreover, the emission of greenhouse gases will be significantly reduced by the adoption of climate-sensitive farming practices (Assisted Natural Regeneration) which will contribute, in the long term to the mitigation of climate change. Moreover, securing transhumance routes will limit livestock incursions in protected areas and will contribute to preserving the carbon sinks of these areas.

At economic level: The adoption of water conservation and management techniques combined with soil restoration and conservation techniques will contribute to improving agricultural production. For livestock production, improved access to water and pastures will contribute to improving animal production and significantly reducing losses.

At food and nutrition security level, the reduction of farming systems vulnerability will contribute to sustainably improving food and nutrition security among vulnerable populations, especially women and children, and to reduce the poverty level in the project zone.

At social level: Improved transhumance will contribute to easing relations between farmers and breeders and to improving the overall social climate. The creation of water points will reduce the incidence of water-borne diseases and women's workload burden related to fetching water for the households. Additionally, developing the provision of irrigation-related services will help create jobs, especially for the youth.

At the gender level: the dissemination of good climate adaptation practices (soil restoration and water conservation) in agriculture will be especially advantageous for women and the youth by reducing the pressure on arable land and by allowing farming on larger surfaces. The creation of water points and overdeepening of ponds will facilitate the practice of new income-generating activities (market gardening). Women groups as most vulnerable population will be particularly targeted by the scaling up of climate change adaptation techniques.

At community and institutional level, their involvement in defining adaptation strategies and the increased role of local communities in combating climate change will strengthen local development dynamics. The capacity building of local collectivities, decentralized structure, producers' and breeders' organization and NGOs will contribute to sustainable climate change adaptation in agriculture as well as raising awareness on the importance and possible impact of Climate change adaptation in agriculture.

2.3. PROJECT ANALYSIS OF THE COST-EFFECTIVENESS

Built on a logic of capitalizing on the achievements of interventions by sub-regional organizations (CILSS, IUCN, CORAF, ACMAD, etc.) through BOAD and RAAF to address regional issues, this project is cost effective compared to implementing activities at the national level only. This aspect is strengthened by the economies of scale induced by the mobilization of expertise familiar with sub-regional issues.

With its component 1 based on the dissemination of climate adaptation practices in agriculture through concrete and structuring actions in rural areas for the direct benefit of farmers, the project will contribute directly to strengthening their capacity. The grant facility selected will enable actual ownership by beneficiaries whilst strengthening the sustainability of impacts. Component 2 focused on strengthening the capacity of key local stakeholders in charge of agricultural development will enable to anchor the project actions in a territorial development trend and will strengthen the quality of local governance. Component 3 which prioritizes development and knowledge sharing will enable beneficiaries both to contribute to fighting climate change and to strengthening the efficiency of local, national and regional interventions.

By focusing these actions on **a transboundary agro-ecological transition zone**, the project with all its activities directly related to the adaptation of agriculture to climate change, is both **catalytic**, **pioneer** and **innovative** in addition to its positive cost-benefit ratio. The implementation of activities such as support livestock mobility and crossborder transhumance

cannot be coordinated only at the national level. Therefore regional coordination have a comparative advantage and cost-effectiveness.

Through these activities (mobile irrigation unit, mainstreaming of endogenous knowledge related to the climate change adaptation in agriculture, etc.), the implementation approach (focused on the scaling up of the best practices related to the climate change adaptation in agriculture), the involvement of local, national and regional actors and the level of action (transboundary transitional crossborder zone), **the project will develop an innovation at the institutional, organizational and technical level.**

Finally, **the scaling up** of best practices related to climate change adaptation in agriculture anchored and tested in the local context, will enable to improve agricultural yield significant positive externalities (jobs, access to water, etc.)

2.4. PROGRAMME IS CONSISTENT WITH REGIONAL AND NATIONAL SUSTAINABLE STRATEGIES

In its implementation approach, the project fits into the UEMOA's Agricultural Policy (PAU), ECOWAS' ECOWAP/CAADP translated into Regional Agricultural Investment Plans (RAIPs), the ECOWAS Environmental Policy (ECOWEP) and the actions of the *Alliance Globale pour la Resilience* (AGIR) – Sahel and West Africa. It also contributes to the implementation of the results of the ECOWAS High Level forum of stakeholders of Climate-smart agriculture in West Africa held in Bamako (Mali) in June 2015.

The project is also in line with the National Agricultural Investment Plans (NAIPs), the NAPAs and NAPs and the COP 21 INDC of Benin, Burkina Faso, Ghana, Niger and Togo.

2.5. PROGRAMME MEETS RELEVANT NATIONAL TECHNICAL STANDARDS, WHERE APPLICABLE, SUCH AS STANDARDS

The national technical standards required by the Governments of Niger, Togo, Burkina Faso, Benin and Ghana will be taken into account. These include (i) environmental impact studies standard , (ii) water-related laws and code; (iii) Land management and land use law; (iv) Code of Local Authorities; (v) Gender Equity and Women's Empowerment; (vi) Core Labor Rights; (vii) Indigenous Peoples; (viii) Involuntary Resettlement; (ix) Protection of Natural Habitats, etc.

Regional community and International standard and convention notably the Convention on biological diversity (CBN) and United Nations Framework Convention On Climate Change will be taken into.

Based on the BOAD project cycle standard, the proposal project will be submitted to the environmental impact evaluation before the implementation. And the environmental management plan will be design in collaboration with key the stakeholders.

2.6. DUPLICATION OF PROJECT

Considering the intervention zone (agro-ecological and transboundary transition), its scale (several contiguous regions of various neighboring countries) and its intervention approach (scaling up of good climate adaptation practices in agriculture by local actors), risks of duplication is limited (few projects with regional approaches). However, a complete mapping of potential overlapping activities will be carried out at the stage of drafting the full proposal of the project. At the level of beneficiary countries, complementarities and synergies will be developed with the others projects related to climate change adaptation in agriculture in the zones of intervention.

2.7. DESCRIBE THE LEARNING AND KNOWLEDGE MANAGEMENT COMPONENT

The production, management and dissemination of knowledge and lessons learnt will be key actions in all the 3 components of the project. This will be done through the production and dissemination of information via a web portal, policy briefs to policymakers, press releases, scientific publications, the creation of databases on practices and the production of awareness raising tools (documentary films, etc.). In the component 1, activities related to climate services and existing best practices in climate change adaptation in agriculture will produce knowledge that will be shared and disseminated through different networks and websites. The component on training the technicians will support the dissemination of knowledge at field level and will help to learn about feedback from the local actors in climate change adaptation in agriculture.

Potential partnerships with key international Knowledge Management Systems like the Climate Technology Centre and Network (CTCN) will be analyzed in lines with communication strategies of the Adaptation Fund to foster the sharing and dissemination of information.

2.8. THE CONSULTATIVE PROCESS

The process of drafting the concept note and identification of activities to be carried out has been extensively consultative and inclusive since most of all groups of stakeholders (producer and breeders' organizations, different ministries, local authorities in the area of intervention, etc.) have been consulted both at the regional level and at the national and local levels. An international consultant was hired to insure regional approach. At the national level, consultants were also hired to provide specific information in the area of intervention and insure coherence with national strategies and priorities as regards climate change adaptation in agriculture. Consultations and interviews were organized with different ministries and other stakeholders involved in climate change adaptation in agriculture.

The consultative process combined different approaches:

(i) A review of the relevant literature and secondary date;

(ii) Interviews with the resource persons who work in the various ministries and organizations involved in climate change adaptation in agriculture in the beneficiaries countries;

(iii) Field visits and discussion meeting were made in Burkina Faso (Ouagadougou, Fada Ngourma and Manga), in Benin (Cotonou and Malanville), in Niger (Niamey and Dosso). Email discussions and telephone conversation were organized with some stakeholders in Ghana and Togo.

(iv) A validation workshop of the concept note which involved the national designated authority, the representatives of the Ministry in charge of agriculture and livestock of beneficiaries' countries and some regional and international organizations was organized on the 6, January 2016 in Lomé (Togo) at the headquarters of the BOAD. This workshop was a good opportunity to have an in-depth discussion with major stakeholders on activities to be carried out in the framework of the project. The methodology adopted enabled to appreciate the potential of adaptation practices, to identify the constraints related to their scaling up, and to define appropriate support measures.

The list of persons and entities met can be found in the annex of this concept note.

2.9. JUSTIFICATION FOR FUNDING REQUESTED, FOCUSING ON THE FULL COST OF ADAPTATION REASONING

Climate changes affect agriculture in all ECOWAS countries at varying levels. The governments of each of these countries supported by technical and financial partners, develop and implement actions for the climate change adaptation in agriculture.

Faced with the complexity and multitude of challenges, the will to capitalize on good common adaptation practices through the implementation of structuring actions for rural areas while pooling the resources mobilized in a regional approach justifies the application submitted to the Adaptation Fund in the context of the first call for proposal of regional projects.

For the Alliance for Climate-smart Agriculture in West Africa which aims at increasing the number of households adopting the practices to 25 million by 2025 in Africa, it is also an opportunity for concrete actions at local level to strengthen resilience among farmers.

2.10. SUSTAINABILITY OF THE PROJECT/PROGRAMME OUTCOMES HAS BEEN TAKEN INTO ACCOUNT WHEN DESIGNING THE PROJECT/PROGRAMME

The sustainability of the project will be ensured at various levels:

- The implementation of actions in Component 1 will be done by field operators, relevant ECOWAS community-based organizations and NGO selected through a call for proposals. The capacity of these entities will then be strengthened during the project implementation. These entities will thus be able to take over at the end of the project.
- The sustainability and ownership of actions will be strengthened by components 2 and 3 aiming at strengthening the capacity of key stakeholders at subnational and ECOWAS levels.

Beneficiary countries are committed to supporting the implementation of project activities. This approach is also necessary for sustainability. Ministries may allocate some resources to insure the continuation of some activities. The training

2.11. PROVIDE AN OVERVIEW OF THE ENVIRONMENTAL AND SOCIAL IMPACTS AND RISKS

The climate adaptation practices to be scaled up have been developed at local level in response to economic, social and environmental constraints experienced by local populations. The environmental and social impacts expected are thus very limited.

Checklist of environmental and social principles	No further assessment required for compliance	Potential impacts and risks –further assessment and management required for compliance
Compliance with the Law	+	
Access and Equity	+	
Marginalized and Vulnerable Groups		+
Human Rights	+	
Gender Equity and Women's Empowerment	+	
Core Labor Rights	+	
Indigenous Peoples		+
Involuntary Resettlement	+	
Protection of Natural Habitats	+	
Conservation of Biological Diversity	+	
Climate Change	+	
Pollution Prevention and Resource Efficiency	+	
Public Health	+	
Physical and Cultural Heritage	+	
Lands and Soil Conservation		+

PART III: IMPLEMENTATION ARRANGEMENTS

3.1. DESCRIBE THE ARRANGEMENTS FOR PROJECT/PROGRAMME IMPLEMENTATION

Implementation of the project will be realized at regional, national and local levels. Overall execution and coordination of the project will be realized under the leadership of the ECOWAS Regional Agency for Agriculture and Food (RAAF/ECOWAS) in close collaboration with ministries and other stakeholders, notably producer organizations involved in the implementation of the project at national and local levels. Several bodies will be set up for guidance and coordination of the implementation of the project at the regional and national levels: a Regional Project management Unit (RPMU) which will be set up by the RAAF/ECOWAS, a Project Steering Committee (PSC) and an Inclusive National Coordination and Concertation Platform (INCCP) supported by a Secretariat (SINCCP).

At the regional level

- **A Regional Project Management Unit (RPMU).** The RAAF/ECOWAS will set up a Regional Project management Unit (RPMU). The mission of the RPMU involves: (i) identifying and contracting with specialized technical institutions best suited for the implementation of specific activities (CILSS, CORAF, ACMAD for agro-meteorology, UICN, CGIAR-CCAFS, etc.), (ii) supporting and facilitating inclusive dialogue for the implementation of activities and fostering synergy between local and regional level and other projects/programmes implemented by other stakeholders, (iii) coordinating and facilitating the operational implementation of activities in close collaboration with beneficiary countries at the national and sub-national/local level, (iv) monitoring and evaluation as well as reporting (in particular to BOAD and the steering committee). The RPMU will be responsible for drafting the Programme of Work and Budget (PWB) which will be submitted to the steering committee for approval. It will be composed of (i) a Coordinator, (ii) programme officers (including an expert on monitoring and evaluation) in charge of monitoring the implementation of component activities of the project and (iii) an administrative support staff. The expert on monitoring and evaluation will be responsible in particular for disseminating lessons learned as well as disseminating results of the implementation of project within other international knowledge sharing platforms.

1) **A Project Steering Committee (PSC).** The PSC is responsible for (i) providing overall guidance for the implementation of the project, (ii) validating the programme of Work and Budget (PWB), (iii) suggesting reorientation of activities of the project, (iv) providing recommendations and guidance as regards next steps for the implementation of the project. The Committee will meet once a year to take stock of the implementation of the Annual Programme of Work and Budget (APWB). The PSC will be composed of statutory members and observers. Statutory members will include the Director of the RAAF/ECOWAS, a representative of Regional Economic Communities (UEMOA, CEDEAO), key technical international and regional organizations working on climate change adaptation in agriculture (CILSS, CORAF, ACMAD), a representative of the Inclusive national dialogue and coordination platform (INCCP), a representative of

regional producer organizations and civil society[26]. Observer members will be composed of NGOs and international organizations invited on an ad hoc basis to contribute to specific issues and analyses. A president and the vice-president of the PSC will be elected by PSC members for the whole period of the project.

At the national and local level

- **An Inclusive National Coordination and Concertation Platform (INCCP)**. The mission of the INCCP is to (i) provide feedback on activities to be implemented at the national level, (ii) participate (through an elected representative) to meetings of the regional project management Unit (RPGM), (iii) monitor implementation of activities and insure coordination and synergies between different ministries and other stakeholders, (iv) insure national priorities are taken into account. The composition of this platform will be set up after concertation in each of the 5 countries involved in the project based on principles of (i) inclusiveness representation, (ii) synergies and complementarity and (iii) concertation, dialogue and consensus.

    - As regards inclusiveness, members of the INCCP will include different ministries involved in the climate change adaptation in agriculture (ministries in charge of environment, agriculture, livestock, fisheries, transport and meteorology, etc.), beneficiaries (producer organizations and farmers), local authorities (regional councils, local governments etc.) in the 12 zones of the project (areas of implementation), local and international NGOs, financial and technical partners implementing activities related to climate change adaptation in agriculture.

    - As regards the principle of synergies and complementarity, an initial analysis will be conducted in all beneficiary countries to identify existing concertation and coordination mechanisms as regards climate change adaptation in agriculture. In countries where such platforms exist already, the INCCP will build on these existing platforms and may adapt to include some members for specific needs of the project. In countries where such platforms does not exist at all, the INCCP will be set up to fulfill the mission of the project. This principle is important in order to build on existing concertation mechanisms and avoid multiplication of concertation and coordination mechanisms. The principle insures also ownership and sustainability of activities of the project.

    - Concerning the principle of concertation, dialogue and consensus and given the diversity of institutional and administrative situation/arrangements in the 5 countries, consultations will be organized at national level to set up an appropriate INCCP. The platform will insure that all stakeholders participate and contribute to the implementation of the project at the local level

[26] In ECOWAS region, there is already a coordination mechanism/platform of regional producer organizations and the civil society which allows to get one representative designated

- **A Secretariat of the Inclusive National Coordination and Concertation Platform (SINCCP).** To be operational, a technical secretariat of the INCCP will be set up. The mandate of the secretariat is to support activities of the president of the INCCP (draft report to be submitted to the INCCP, animate the concertation of the INCCP, etc.) but also so to technically liaise with the RPMU to insure better coordination between local, national and regional levels. The secretariat is composed of an expert on climate change and an assistant.

The BOAD, in its capacity as regional implementation entity, will supervise the implementation of the project in accordance with the Fund's management rules. To this end, it will issue its no objection to the work program of the RPMU as well as the procedures for acquiring goods and services.

The Bank will conduct periodic supervision missions of the project on the ground and draft reports to the Fund. Through its missions, the Bank will provide technical support for the smooth implementation of the project. Under the procedures of the Fund, the Bank will develop on the basis of RPMU's monitoring reports and its supervision missions, periodic monitoring reports including the annual activity report, the mid-term and the final evaluation reports.

3.2. DESCRIBE THE MEASURES FOR FINANCIAL AND PROJECT/PROGRAMME RISK MANAGEMENT

A comprehensive analysis of the financial framework and risk management of the project will be developed during the formulation of the full proposal of the project. This framework will be specified in the procedural and operational manual to be agreed upon between the main stakeholders (BOAD, RAAF and Adaptation Fund).

In a bid to manage financial risks, a reference framework will be established to specify the modalities of budget and fiduciary management that will govern the relations and operation of the entities involved in implementing the project. The financial management policies of beneficiary countries, BOAD and the Adaptation Fund will be integrated and reflected in this framework.

3.3. DESCRIBE THE MEASURES FOR ENVIRONMENTAL AND SOCIAL RISK MANAGEMENT IN LINE WITH THE ENVIRONMENTAL AND SOCIAL POLICY OF THE ADAPTATION FUND

An environmental and social impact study will be conducted during the formulation of the final project document (full proposal). An environmental and social management plan will be produced and implemented during the project implementation phase.

3.4. DESCRIBE THE MONITORING, EVALUATION AND CAPITALIZATION ARRANGEMENTS AND PROVIDE A BUDGETED M&E PLAN

A monitoring-evaluation mechanism for the project activities will be implemented to assess the progress made towards achieving the outcomes and objectives of the project. It will allow to identify the strengths and weaknesses in the project implementation in order to take the necessary actions in a timely manner. Internal monitoring will be entrusted to the Regional Project Management Unit (RPMU) based at RAAF. In each beneficiary country, the RPMU will carry out two joint annual monitoring missions to assess the smooth operation of project

activities in close collaboration with the inclusive national coordination and concertation platform (INCCP). A monitoring mission will be carried out to make recommendations to the Steering Committee. A project monitoring and evaluation plan will be developed and an expert on M & E will be hired to insure follow up of the project in lines with targets and indicators.

During the project implementation, technical support will be provided to the technical services and producers' organizations for the development of simple participatory monitoring and evaluation tools.

Monitoring and evaluation will be done through:

- Evaluation and planning meetings with stakeholders;
- Quarterly reports and annual reviews by the project team;
- Field visits.

Annual evaluation: An annual evaluation conducted by RPMU in close collaboration of the INCCP will be submitted to the Project Steering Committee (PSC). It will address the progress made towards achieving the objectives, the lessons learned, risk management, budget implementation and the challenges related to the implementing of the project. This evaluation will also cover the technical and financial aspects.

Mid-term evaluation: This will be conducted to assess the efficacy, efficiency and relevance of the activities implemented in the context of the project. The report produced will highlight issues that require decisions and actions, and the first lessons learned from the formulation, implementation and management of the project. If necessary, reorientation of some activities will be recommended. According to BOAD rules, a mid-term evaluation is mandatory for projects of more than 3 years.

Terminal evaluation and ex-post evaluation: It will be conducted at the end of the project and recommendations should also be made on additional measures to strengthen project sustainability. According to BOAD rules, an independent assessment (including financial audit) is mandatory for projects of more than 3 years

The Capitalization will be done by the RAAF/ECOWAS during the project implementation to sustainably strengthen institutional capacities

3.5. INCLUDE A RESULTS FRAMEWORK FOR THE PROJECT PROPOSAL, INCLUDING MILESTONES, TARGETS AND INDICATORS

This section will be developed during the drafting of the project document (full proposal)

3.6. DEMONSTRATE HOW THE PROJECT/PROGRAMME ALIGNS WITH THE RESULTS FRAMEWORK OF THE ADAPTATION FUND

This section will be developed during the drafting of the project document (full proposal)

Project Objective(s)[27]	Project Objective Indicator(s)	Fund Outcome	Fund Outcome Indicator	Grant Amount (USD)
Project Outcome(s)	**Project Outcome Indicator(s)**	**Fund Output**	**Fund Output Indicator**	**Grant Amount (USD)**

3.7. INCLUDE A DETAILED BUDGET WITH BUDGET NOTES, A BUDGET ON THE IMPLEMENTING ENTITY MANAGEMENT FEE USE, AND AN EXPLANATION AND A BREAKDOWN OF THE EXECUTION COSTS

This section will be developed during the drafting of full proposal project.

3.8. INCLUDE A DISBURSEMENT SCHEDULE WITH TIME-BOUND MILESTONES

This section will be developed during the drafting of the of full proposal project.

[27] The AF utilized OECD/DAC terminology for its results framework. Project proponents may use different terminology but the overall principle should still apply

PART IV: ENDORSEMENT BY GOVERNMENT AND CERTIFICATION BY THE IMPLEMENTING ENTITY

A. Record of endorsement on behalf of the government[28] *Provide the name and position of the government official and indicate date of endorsement. If this is a regional project/programme, list the endorsing officials all the participating countries. The endorsement letter(s) should be attached as an annex to the project/programme proposal. Please attach the endorsement letter(s) with this template; add as many participating governments if a regional project/programme:*

(Enter Name, Position, Ministry)	Date: *(Month, day, year)*

B. Implementing Entity certification *Provide the name and signature of the Implementing Entity Coordinator and the date of signature. Provide also the project/programme contact person's name, telephone number and email address*

I certify that this proposal has been prepared in accordance with guidelines provided by the Adaptation Fund Board, and prevailing National Development and Adaptation Plans (i) Regional Agricultural Investment Plan (RAIP), ii) National Agricultural Investment Plans (NAIPs), iii) National Adaptation Programme of Action (NAPAs), iv) National Adaptation Plans (NAPs) and v) national communications.) and subject to the approval by the Adaptation Fund Board, commit to implementing the project/programme in compliance with the Environmental and Social Policy of the Adaptation Fund and on the understanding that the Implementing Entity will be fully (legally and financially) responsible for the implementation of this project/programme.	
Almamy MBENGUE *Directeur de l'Environnement et de la Finance Climat (BOAD)* Implementing Entity Coordinator	
Date: *January, 11th, 2016*	Tel. and email:ambengue@boad.org
Project Contact Person: Ms Fatoumata T. SANGARE	
Tel. And Email: +228 22 23 27 96/ ftoure@boad.org	

[6] EACH PARTY SHALL DESIGNATE AND COMMUNICATE TO THE SECRETARIAT THE AUTHORITY THAT WILL ENDORSE ON BEHALF OF THE NATIONAL GOVERNMENT THE PROJECTS AND PROGRAMMES PROPOSED BY THE IMPLEMENTING ENTITIES.

1. ANNEXES

ANNEXE 1 : LIST OF PERSONS MET DURING FIELD VISITS 1

PROJET PROMOTION DE L'AGRICULTURE INTELLIGENTE EN AFRIQUE DE L'OUEST				
Name	**STRUCTURE / FONCTION**	**E-MAIL**	**CONTACT**	**Country**
BILA MAINA	Ministère de l'environnement (ME)/ Secrétaire général	bila_maina@yahoo.fr - 96 96 9733		**NIGER**
SALISSOU YAHOUZA	Direction Générale de l'Environnement /Point focal	mwane2003@yahoo.fr	96261942	
ABDOU SADOU OUMAROU	Ministère de l'environnement -Direction des Etudes et des politiques – chargé d'études	asomar74@yahoo.fr	96275615	
IBO ADAMOU	Directeur Générale des Eaux et Foret /- DG Adjoint	ibnoadamou@yahoo.fr	96965910	
M.MAMOUDOU IDRISSA	Responsable du suivi-Evaluation des programmes des conventions biodiversité, le changement climatique et la désertification au Secrétariat Exécutif du CNEDD, Responsable du suivi-Evaluation du PAC/RC			
M.ISSA IDI	Conseiller au secrétariat Exécutif du CNEDD/Division changement et variabilités climatiques			
BOUBACAR GOUBE	Ministère de l'Agriculture (MAG) – Secrétaire	illiassougaoh@yahoo.fr	968811	

ILLIASSOU	Général Adjoint		65	
Dr MOUSSA HASSANE	Chercheur à l'Institut National Agronomique au Niger (INRAN). Spécialiste de l'Environnement Ancien DG de l'INRAN			
M.IRO MAMAN	Coordonnateur régional de l'initiative 3N de Tillabéry			
M.ATTIKOU AMADOU	Coordonnateur régional de l'initiative 3N de Tillabéry			
M.YAHAYA TANKARI	Secrétaire général de la région de DOSSO			
IBRAHIMA DOUBOU	Ministère de l'Agriculture Directeur Régional de l'Agriculture (DRA) Dosso	doubouibrahima@gmail.com	98697869	
DAM-TANI AMADOU	Ministère de l'Agriculture DRA - Directeur	dantani.amadou@yahoo.fr	96593635	
IBRAHIM MAHAMANE BASSIROU	Ministère de l'Agriculture - DRA - Inspecteur Régional	bassirou@hotmail.com	96879333	
IDRISSA MOUSSA	Directeur Régional de l'Elevage	idrissamenssa11@yahoo.fr	96469139	
ALLOKE GILBERT	Ministère de l'environnement - Direction Régionale de l'Environnement (DRE) - Directeur Régional Adjoint	alloke_gilbert@yahoo.fr	96192982	
ENGELBERTIHO ANDRE	Représentant pays	Aengelbertihosnvword.org	65254762	**Benin cotonou**
DJIHOUN MARCEL	Coordonnateur - AGRI PROFOCUS -	mdjihoun@agriprofocus.com	95338303	**Benin cotonou**

DJATAOU MAIMOUNA	Mairie Malanville/ Agent de la mairie	62347750 / 64585608	**BENIN (MALAMVILLE)**
SEINI YAYE IDRISSOU	Mairie Malanville/ Agent de la mairie	97642913 / 94214262	
MOUSSA MAMA IDI	Producteur Toumboutou	67399733	
ASSANE AZIZOU	Producteur Toumboutou	96805062	
SINA GATCHI	Producteur Toumboutou		
KOTOKOLI ISSIAKA	Producteur Toumboutou	96457605	
FARAM AMANI	Producteur Toumboutou	62150187	
DAOUDA MADJIDOU	Producteur Toumboutou	96910578	
GAKOE MACHAOUDOU	Producteur Toumboutou	97159883	
ISSAKA DAOUDA	Producteur Toumboutou	96463378	
BANGNA BOUKARI	Producteur Toumboutou	67526955	
ISSAKA ASSIA	Producteur Toumboutou		
ZIKA BACHIROU	Malanville SCDA	97151961	

KOSSOUKOE ROUFAI	Producteur Toumboutou	66693870	
ARZOUMA DJIBRIL	Agent de la mairie -	97131285	
NOMA YACOUBOU	Agent de la mairie -	97132953	
GODJI A. IBRAHIM	Agent de la mairie Direction Technique	97447093	
SABI G.ATIKOU	Secrétaire Générale -PI	66304464	
ALI BOUREIMA RABI	Responsable GF/Malanville	97474339	
AYAGAOU I. SAIBOU	Ministère de l'environnement - IVEP GF/Malanville	66373700	
TINY AMADOU	Mairie Malanville/ Agent de la mairie	97478186	
ELEGBE VALENTIN	Mairie Malanville/ Agent de la mairie	95172125	
BAWA SANNI BASSIDOU	Toumboutou Malanville	94149191 / 97865335	
GOUMBI SINA	Producteur Rizerie Malanville	97233113/94014741	
BOKONON-GANTA ENOCH	Consultant Nat. FAO Cotonou	97056811	
AKZOUMA Djibril	Agent de la mairie	97 13 12 85	
DJATAOU Maîmouna	Agent de la mairie - SAEF	62 34 77 50	

TOROU Gado	Productrice Toumbouta		
ASSANE Aziz	Producteur Toumbouta	96 80 50 62	
GODJI A. Ibrahim	Agent de la mairie - Direction Technique	97 44 70 93	
KOTOKOLI Issiaka	Producteur Toumbouta	96 45 76 05	
BANGNA Boucari	Producteur Toumbouta	67 52 69 55	
KOSSOUKOUE Roufaï	Producteur Toumbouta	66 69 38 70	
Sima GOUMBI	Producteur Rizerie Malanville	97 23 31 13	
SABI G. Atikou	Agent de la mairie – Mville	66 30 44 64	**BENIN (MALAMVILLE) -Travaux en Groupe II**
MOUSSA Mama Idé	Producteur TBI	67 39 97 33	
ELEGBE Valentin	Agent de la mairie	95 17 21 25	
AYAGAOU I. Saïbou	JVEP / SADE	66 37 37 00	
TINY Amadou	Mairie Malanville / Agent de la mairie	97 47 81 86	
ALI BOURAIMA Ravi	GF / Malaville	97 47 43 39	
ISSIAKA Daouda	Representant / CV	96 46 43 78	
DAOUDA Madjolou	Producteur Rizerie Malanville	96 91 50 78	
ISSAKA Assia	GF / Toumbouta	-	
FARAN Amavi	Producteur Toumbouta	62 15 01 87	
Bawa Sanvi Bassidou	CA (Malanville - Toumbouta	94 14 91 91	
DJATAOU MAIMOUNA	Mairie Malanville	62347750 / 64585608	

SEINI YAYE IDRISSOU	Mairie Malanville	97642913 / 94214262	
MOUSSA MAMA IDI	Producteur Toumboutou	67399733	
ASSANE AZIZOU	Producteur Toumboutou	96805062	
SINA GATCHI	Producteur Toumboutou		
KOTOKOLI ISSIAKA	Producteur Toumboutou	96457605	
FARAM AMANI	Producteur Toumboutou	62150187	
DAOUDA MADJIDOU	Producteur Toumboutou	96910578	
GAKOE MACHAOUDOU	Producteur Toumboutou	97159883	
ISSAKA DAOUDA	Producteur Toumboutou	96463378	
BANGNA BOUKARI	Producteur Toumboutou	67526955	
ISSAKA ASSIA	Producteur Toumboutou		
ZIKA BACHIROU	SCDA/Malanville	97151961	
KOSSOUKOE ROUFAI	Producteur Toumboutou	66693870	
ARZOUMA DJIBRIL	Agent de la mairie	97131285	
NOMA YACOUBOU	Agent de la mairie - SADE	97132953	
SABI G.ATIKOU	Secretaire Generale -PI	66304464	
ALI BOUREIMA RABI	Responsable GF/Malanville	97474339	
AYAGAOU I. SAIBOU	IVEP GF/Malanville	66373700	
TINY AMADOU	Mairie Malanville	97478186	

ELEGBE VALENTIN	Mairie Malanville	95172125	
BAWA SANNI BASSIDOU	CA Toumboutou Malanville	94149191 / 97865335	
GOUMBI SINA	Rizerie Malanville	97233113/94014741	
BOKONON-GANTA ENOCH	Consultant Nat. FAO Cotonou	97056811	
SAGBOHAN Jacqueline	Direction de la Production Végétale - Coordonateur Projet FAO GEP / MAEPBEN/056/GFF	sagbohanjacqueline@yahoo.fr - 00229 97 47 76 95	**Benin**
YESSOUFOU Lamidi	Direction de la Production Végétale - Assistant de la Coordonnatrice	97 33 59 52 - yeslamid@yahoo.fr	
HOUNKPONOU K. Said	Directeur Exécutif - IDID –ONG -	Kolawoles@yahoo.fr	
FANDOHAN Sylvestre	ProAfn – GIZ – Coordonnateur	97 31 22 38- Sylvestrefandohan@giz.de	
Ibnou DIENG	AfricaRice – Biometricien	66363806 - i.dieng@cgiar.org	
TAMÔ Mannele	IITA – Entomologiste	95 96 13 06 - m.tmo@cgiar.org	
Raymond VODOUHE	Bioversitien International – Généticien --	95 71 33 33 - r.vodouhe@cgiar.org	
TOTO Bernadin	PNOPPA - SP/PNOPPA	97 60 32 11 - htotober@yahoo.fr	
SANFO Mamadou	Consultant/ FAO – BF - Ouaga	70 62 63 69	**BURKINA FASO**
Kiemar André	Consultant/ FAO – BF - Ouaga	70 11 30 38	

HIEN Rodrigue	Ministère de l'Agriculture Agent SRAPA / mag DRARHASA – Centre ESt Tenkodogo - Tontonro25@yahoo.fr	70 44 30 18	
SAWADOGO Claude	Chef de service Régional des aménagements et production agricoles Tenkodojo	C_sawadogo@yahoo.fr 70 26 72 27	
DEMBELE Ousmane	Directeur Régional de l'Environnement Tenkodogo	73 20 29 20	
Nougtara Tiyacouba	President chambre Regionale D'Agriculture Tenkodogo	70 02 88 63 agriculteurces@yahoo.fr	
Boukoungou Carine gisèle	Ministère de l'Agriculture Secrétaire de Direction de ma Conseil regional agricole (CRA) – Centre Est Tenkodogo	70 73 66 91 / 78 43 75 00	
BATIEBO Jean-Marie	DRRA Centre Est Tenkodogo	7027 82 77 / Jmbatieebo@gmail.com	
Nama Felix	SEP / Direction régionale des Ressources animales Tenkodogo	71 25 07 21 / namafelixs@yahoo.fr	

Yiho Mamadou	Directeur Provincial agriculture Koulpelogo	71 78 80 17	
LOMPO Diamoadi	Animateur / RECOPA Fada Gourma	+ 226 70 31 14 59	
THIOMBIANO Y. Frédéric	Animateur / RECOPA Fada Gourma	+226 75 08 82 08	
MAIGA Boubacar	Responsable Programme / RECOPA Fada Gourma	+226 70 31 13 79	
SAMA Isidore	Directeur Provincial / Direction Régionale De l'Environnement et du Développement Durable de l'Est Fada Gourma	+226 70 13 00 88	
TANKOANO Oumarou	Chef Service Etude et Programmation / Direction Régionale des Ressources Animales de l'Est Fada Gourma	+226 70 36 30 02	
YONLI Philippe	Président / Chambre Régionale d'Agriculture de l'Est Fada Gourma	+226 70 92 55 19	
THIOMBIANO Jean Paul	Secrétaire Général / Chambre Régionale d'Agriculture de l'Est Fada Gourma	+226 70 66 56 60	
OUATTARA Arouna	Directeur Régional / Direction Régionale de l'Economie et de la Planification de l'Est Fada Gourma	+226 70 31 17 97	
BONKOUNGOU Ousmane	Directeur Régional / Direction Régionale des Ressources Halieutiques, de l'Assainissement et de la Sécurité Alimentaire de l'Est Fada Gourma	+226 70 25 50 81	

THIOMBIANO Abiba	Chargé de la Promotion Economique / Direction Régionale des Ressources Halieutiques, de l'Assainissement et de la Sécurité Alimentaire de l'Est Fada Gourma	+226 70 64 89 28	
TRAORE Fidel	Chef Service Etudes et Statistiques / Direction Régionale des Ressources Halieutiques, de l'Assainissement et de la Sécurité Alimentaire de l'Est Fada Gourma	+226 70 85 59 81	
ILBOUDO Edouard	Chef Service Aménagement Hydroagricole / Direction Régionale des Ressources Halieutiques, de l'Assainissement et de la Sécurité Alimentaire du Centre Sud Manga	+226 27 64 61	**BURKINA FASO**
OUEDRAOGO Luc	Chef Service Foncier / Direction Régionale des Ressources Halieutiques, de l'Assainissement et de la Sécurité Alimentaire Centre Sud Manga	+226 70 73 80 40	
DIESSONGO Aminou	Directeur Régional / Direction Régionale des Ressources Animales du Centre Sud Manga	+226 70 75 84 24	
DAHO Isabelle	Directrice Régionale / Direction Régionale De l'Environnement et du Développement Durable du Centre Sud Manga	+226 70 28 40 33	

2. ANNEXE 2 : MAIN CONCLUSIONS AND RECOMMANDATIONS OF THE VALIDATION WORKSHOP OF THE CONCEPT NOTE : "PROMOTING SMART AGRICULTURE TO CLIMATE CHANGE FOR FOOD SECURITY IN WEST AFRICA"- (6, JANUARY 2016, LOMÉ TOGO)

Introduction

1. As part of the call for proposal of the Adaptation Fund, ECOWAS in collaboration with the West African Development Bank, FAO and the Designated National Authorities (DNAs) of Benin, Burkina Faso, Ghana, Niger and Togo have made a pre-concept note which was accepted. It focuses on promoting the scaling of smart agriculture to climate change that will allow the adaptation of populations to the impacts of climate change and its resilience to food insecurity;

2. The project aims to: i) promote the dissemination of good practices for adaptation of populations to the impacts of risk and changes, ii) to ensure the integration of best practices for

adaptation to climate risks in strategies and agricultural projects at national and regional and sub regional level iii) insure knowledge management on good practices for adaptation of agriculture to climate risks;

3. Wednesday, January 6, 2016, was held in the conference room of the West African Development Bank (BOAD) in Lome, Republic of Togo, a validation workshop of the "concept note" of the said project. The workshop saw the participation of BOAD teams, ECOWAS-RAAF, FAO, the Designated National Authorities (DNAs) of the Adaptation Fund, in charge of the Ministries of Agriculture, Representatives of the countries concerned (Benin, Burkina Faso, Ghana, Niger and Togo. Attached is the list of attendance.

4. The meeting for the validation of the Concept Note was jointly organized by (BOAD), the Regional Agency for Agriculture and Food (RAAF) ECOWAS and FAO.

Purpose of the workshop

5. The overall objective of the workshop was to discuss the concept note of the project "Promoting climate-smart agriculture" to be submitted to the Adaptation Fund.

6. More specifically, the workshop aimed at:

- informing recipient countries of the call for proposal of the projects.
- Discussing the activities and proposals of project implementation mechanisms;
- Identifying the need for additional information to strengthen link between the concept note of the regional project, national priorities of the countries concerned as well as the synergies between the activities proposed in the project and those already in progress in the area of intervention.

Opening *Ceremony*

7. The opening ceremony was chaired by the Director in charge of Environment, BOAD and the Executive Director of the Regional Agency for Agriculture and Food, ECOWAS.

8. All these Directors warmly thanked the Adaptation Fund, the Designated National Authorities (DNAs) and the Ministries of Agriculture of 5 Project countries for their interest in the project.

9. They also stressed that the BOAD and the ECOWAS- RAAF will spare no effort for better project formulation that will contribute to the implementation of the agricultural policy of ECOWAS (ECOWAP) reviewed for consideration of climate change dimensions.

Proceedings

10. Following the opening of the workshop, the work was chaired by Mr. Dramane Coulibaly, Resource person and moderation was provided by Dr. Ablassé Bilgo, Head of the Technical Unit of the RAAF- ECOWAS. The reporting was provided by the team of the RAAF, FAO and BOAD.

11. Work began with a brief presentation on the scheme of call for proposal focusing on criteria of eligibility and guidelines of the call for proposal.

12. At this level, it was recalled that the eligible projects are those that should be of great value, innovative and regional activities, a cost/effectiveness ratio acceptable and a coordination mechanism developed at regional and national level. In addition, each beneficiary country should demonstrate its commitment through a letter of endorsement.

13. After this initial presentation, the second focused on the "concept note". It came with a comprehensive presentation of the note which main points are the three components of the project, broken down into expected results and activities and institutional anchorage.

14. Component 1 will be devoted to the dissemination of good practices for adaptation to climate risks locally.

15. Component 2 will involve the integration of best practices for adaptation to climate risks in strategies and agricultural projects at national and sub regional level.

16. Component 3 will be the knowledge management on best practices for adaptation of agriculture to climate risks.

17. At the institutional level, it is noted that the coordination of the project will be provided by the Regional Agency for Agriculture and Food ECOWAS (ARAA) with a Project Management Unit based at its headquarters and BOAD will ensure the financial management of the project.

1. *Presentations and discussion during the workshop*

18. Following the two presentations, contributions, comments and clarification questions were addressed by the participants to finalize the concept note.

19. <u>In respect of questions:</u>

Clarification of the questions focused on the value added at institutional, technical and financial; the contents of the innovative nature of the project; country engagement; criteria and targeting the role of BOAD.

Satisfactory responses have been made to various points. On the specific role of the BOAD, it was clarified that BOAD should not be part or the project management unit or the steering committee. BOAD will issue only non-objection on the implementation of project activities as it will provide the mandate for the management of financial resources.

As for the identified activities, it was also recalled that a field mission was carried out in the countries to diagnose the priorities of national stakeholders, including exchanges by phone or by mail, and the interventions of experts from the FAO Representation in countries allowed the identification of three components of the project activities declined. So the question of consistency with national priorities is assured.

20. In respect of contributions and comments:

The participants made comments and suggestions which will be taken into account in the development of the full note. In addition, the question of definitions, harmonization of concepts, correction of certain data, the issue of sensitization of stakeholders, taking account of certain activities such as reducing post-harvest losses, and supplemental irrigation, the clear use of the terms climate change, lack of socio environmental impact assessment, highlighting the link between strategies / policies of the countries and the project, capacity building has been sufficiently addressed.

It was agreed to review the institutional arrangement setting out the general guidelines and the details should be made at the time of formulation of the document of the full project will be the third phase of the process.

21. At the end of the workshop, the draft concept note has been validated and endorsed by the Designated National Authorities. Only Ghana AND who became represented endorse the draft next week. The team in charge of project formulation work will take into account all the needs of countries for finalizing the Concept Note before submission to the Adaptation Fund. Countries thanked the Adaptation Fund and requested funding for this project that meets national and regional priorities to allow populations resilience to climate change impacts.

List of Participants to the validation workshop of the concept note Lomé-Togo, 6 January 2016

Name	STRUCTURE / country	FONCTION	CONTACT (Téléphone – Email)
Dramane Coulibaly	FAO / CILSS Ouaga	Conseiller Principal Resilience	cool1150@1150@yahoo.fr dramane coulibaly@fao.org
Bilgo Ablasse	CEDEAO / ARAA	Chef Unité technique	+228 92 7347 11 ablassebilgo@yahoo.fr
Sangare Fatoumata	Boad / Lomé	Analyste Financier	+228 22 23 27 96 ftoure@boad.org
DJIBRIL Ibila	AND du FA du Benin Ministère de Environnement	AND du Benin pour le Fonds d'Adaptation	Idjibril @yahoo.fr +229 97 98 94 38
MORA KORA Nourou-Dine	Ministère de l'environnement Bénin	Chercheur Environementaliste Assistant du Ministre de l'Environement	Deeno18@yahoo.fr +229 95 61 97 65
Adama TAOKO	FAO-Bureau Regional Afrique	Politiques et Programme	Adama .Taoko@fao.org +233 265083422
Peter Deny	Ghana	Deputy Director	0233 243646749
Kingsley Kwako Amoako	Ghana	Head of Unit	+233 244599596 kingkwako@yahoo.com
ALAGBE Jonas	ARAA / TOGO	Operations officer	+228 91 39 24

YABOURI NAHMSATH	ARAA / ECOWAS	Stat IT Officer	+228 9038 20 29 nyabouri@gmail.com
Amadou Mactar KONATE	ARAA/ ECOWAS Togo	Coordonateur PASANAO	+228 98 98 78 18 konatemactar@gmail.com
GLE Koffi Ammanuel	ARAA/ ECOWAS Togo	Chef unité Technique Gestion de la Reserve	+228 90099159 emmanuelgle@gamil.com
KONLANI Kanfitin	ARAA/ ECOWAS Togo	Expert Securité Alimentaire	+228 90 22 52 29 kkonlani@yahoo.fr
Younoussa Idrissa	AGGR /Ministère de l'agriculture du Niger	Directeur Mobilisation des Eaux	younoussaidrissa@yahoo.fr +22796076673
Dr Kamayé Maâzou	Secretaire Executif /CNEDD	Secrétaire Exécutif	Kamayemaazou@yahoo.fr +227 96987470
Dr BOKONON-GANTA Bonaventure	Consultant agroclimatologue Benin	Consultant National FAO-Benin	+229 97 05 68 11 bblganta@yahoo.com
FALL Boubacar	Consultant environnemantaliste Senegal	Consultant BOAD / DEFIC	boubafall@yahoo.fr
ROUAMBA Adama	Burkina Faso	CT /DGCOOP MEF	+226 70203285 Rouamba_adama@yahoo.fr
Touree Adama	Burkina Faso	Directeur de la formulation des politiques	+226 70130862 Adatoure18@yahoo.fr
BATOKO Mouniratou	BOAD	Analyste Financier	mbatoko@boad.org

GUISSOU sibraogo Richard	ARAA / CEDAO Togo	Expert Planification Stratégique et Gestion des cycles des Projets Agricoles	Richardguissou@yahoo.fr 99 25 01 82
Leonidas HITIMANA	FAO / ARAA	Coordonateurs de projet	90 91 16 46
Side Stéphane Claude	FAO/ ARAA	Consultant	
BAMALI Tahontan P. Abalo	Ministère de l'environnement - Direction de l'environement /	Point Focal PNA	90 20 16 66 dibamail@yahoo.fr
MBENGUE Almany	BOAD	Directeur DEFIC	ambengue@bad.org
Salifou Ousseni	CEDEAO/ ARAA	Directeur Exécutif	+228 98 28 26 32
Gloria AKPOTO-K	FAO RAF	Assistant Administrative	+228 90 39 92 09

ATELIER DE VALIDATION DE LA NOTE CONCEPTUELLE DU PROJET REGIONAL CEDEAO / BOAD SUR LA PROMOTION DE L'AGRICULTURE INTELLIGENTE EN AFRIQUE DE L'OUEST

BOAD - Lomé, le 6 janvier 2016

LISTE DE PRESENCE

N° d'ordre	NOM ET PRENOMS	STRUCTURE / PAYS	FONCTION	CONTACT (Téléphone – Email)	SIGNATURE
1	Aramane Coulibaly	FAO/CILSS Ouaga	Conseiller Principal Politique	conseil1150@yahoo.fr aramane.coulibaly@fao.org	
2	Bilgo Ablassé	CEDEAO/ ARAA	Chef Unité technique	+228 92 73 47 11 ablassebilgo@yahoo.fr	
3	SANGARE Fatoumata	BOAD/ Lomé	Analyste Financier	+228 22 23 27 96 fsanare@boad.org	
4	DJIBRIL Ibila	ANDA du F.A. du Bénin Minist. Environ	ANDA du Bénin par le Fonds d'Adaptation	idjibril@yahoo.fr +229 97 98 94 38	
5	MORA KORA Nourou-Dine	Ministère de l'environnement Bénin	Chercheur Environnementaliste Assistant du Ministre de l'env.	deeno18@yahoo.fr +229 95 61 97 65	
6	Adama TAOKO	FAO - Bureau Regional Afrique	Politiques et Programmes	Adama.Taoko@fao.org +233 265083422	

N° d'ordre	NOM ET PRENOMS	STRUCTURE / PAYS	FONCTION	CONTACT (Téléphone – Email)	SIGNATURE
7	Peter Dery	Ghana	Dep. Director	+233 244644749 Peterjdery@yahoo.com	
8	Kingsley Kwaku Amoako	Ghana.	Head of Cellunit	+233244599596 Kingkwaw@yahoo.com	
9	ALAGBE Jonas	ARAA / Togo	Operations officer	+ 228 9139 24 jonasfort@yahoo.fr	
10	YABOURI NAHMSATH	ARAA/Ecowas	Stat/IT Officer	+228 90382029 nyabouri@gmail.com	
11	Amadou Mactar SKONATE	ARAA/Ecowas Togo	Coordonateur PASANAO	+228 98987818 skonatemactar@gmail.com	06/01/16
12	GLE Koffi Emmanuel	ARAA/Ecowas Togo	Chef Unité Technique GRN de la Réserve	+228 90099159 emmanuelgle@gmail.com	06/01/16
13	KONLANI Kanfitin	ARAA/CEDEAO Togo	Expert Sécurité Alimentaire	+228 90225229 KKonlani@yahoo.fr	
14	Youmoussa Idrissa	AGGR/MAG	Directeur Mobilisation des Fonds	youmoussaidrissa@yahoo.fr +227 96076673	
15	Dr Kamayé Maazou	SE/CNEDD	Secrétaire Exécutif	kamayemaazou@yahoo.fr +227 96987476	

N° d'ordre	NOM ET PRENOMS	STRUCTURE / PAYS	FONCTION	CONTACT (Téléphone – Email)	SIGNATURE
16	Dr BOKONON-GANTA Bonaventure Eustache	Bénin	Consultant National FAO Bénin	+229 97056811 bbkganta@yahoo.com	
17	FALL Boubacar	SENEGAL	Consultant BOAD/DEFIC	boubafall@yahoo.fr 221775183755	
18	ROUAMBA Adama	BF	CT/DGCOOP MEF	+226 70203285 rouamba_adam@yahoo.fr	
19	TOURE Adama	Burkina Faso	Directeur de la formulation des politiques	+22670130862 adatoure12@yahoo.fr	
20	BATOKO Moumouni	BOAD	Analyste Financier	mbatokoo@boad.org	
21	GUISSOU Sibiaogo Richard	ARAA/CEDEAO Togo	Expert Planification Stratégique & Gestion du cycle des Projets Agricoles	richardguissou@yahoo.fr 99250182	
22	~~LEONIDAS~~ KITIMANA	~~FAO~~/ARAA	coordonnateur de projet	90911646	
23	Sido stéphane Claude	~~FAO~~/ARAA	Consultant		
24	BAMALI Tahontan P-Abalo.	Direction de l'Env./MERF	Point Focal PNA	90201666 dibamail@yahoo.fr	

N° d'ordre	NOM ET PRENOMS	STRUCTURE / PAYS	FONCTION	CONTACT (Téléphone – Email)	SIGNATURE
25	MBENGUE Almamy	BOAD	Directeur AEFIC	ambengue@boad.org	
26	Salifou Ousseni	CEDEAO/ ARAF	Directeur exécutif	+228 98 28 26 32	
27					
28					
29					
30					
31					
32					

REPUBLIQUE DU BENIN

MINISTERE DE L'ENVIRONNEMENT, CHARGE DE LA GESTION
DES CHANGEMENTS CLIMATIQUES, DU REBOISEMENT ET DE LA PROTECTION
DES RESSOURCES NATURELLES ET FORESTIERES

AUTORITE NATIONALE DESIGNEE DU BENIN POUR LE FONDS D'ADAPTATION

Cotonou, 6th January 2016

To: The Adaptation Fund Board
c/o Adaptation Fund Board Secretariat
Email: Secretariat@Adaptation-Fund.org
Fax: 202 522 3240/5

Subject: Endorsement for Project "Enhancing the resilience to climate change of populations in West Africa by promoting the dissemination of practices of Climate Smart Agriculture".

In my capacity of Benin's Designated National Authority for the Adaptation Fund, I confirm that the above regional project proposal is in accordance with the Government's national priorities in implementing adaptation activities to reduce adverse impacts of, and risks, posed by the climate change in Benin.

Accordingly, I am pleased to endorse the above project/programme proposal with support from the Adaptation Fund. If approved, the project/programme will be implemented by the Banque Ouest Africaine de Développement (BOAD) in collaboration with the Economie Community of West African States (ECOWAS) and executed by the General Directory of Climate Change (GDCC) of Benin.

Designed National Authority,

Ibila DJIBRIL

CC:

- M. Théophile C. WOROU, Minister of Environment in charge of Climate Change
- SG du Ministère de l'Environnement
- SG du Ministère de l'Agriculture
- Directeur Général des Changements Climatiques

ADAPTATION FUND

Burkina Faso
Unité-Progrès-Justice

Letter of Endorsement by Government

Ouagadougou, January 6th , 2016

To: The Adaptation Fund Board
c/o Adaptation Fund Board Secretariat
Email: Secretariat@Adaptation-Fund.org
Fax: 202 522 3240/5

Subject: Endorsement for Project "Enhancing the resilience to climate change of populations in West Africa by promoting the dissemination of practices of Climate Smart Agriculture"

In my capacity as designated authority for the Adaptation Fund in Burkina Faso, I confirm that the above regional project proposal is in accordance with the government's national priorities in implementing adaptation activities to reduce adverse impacts of, and risks, posed by climate change in Burkina Faso.

Accordingly, I am pleased to endorse the above project/programme proposal with support from the Adaptation Fund. If approved, the project/programme will be implemented by Banque Ouest Africaine de Developpement (BOAD) in collaboration with The Economic Community of West African States (ECOWAS) and executed by technical Ministries and actors of Burkina.

Sincerely

MINISTERE DE L'ECONOMIE ET DES FINANCES
LE DIRECTEUR GENERAL
DIRECTION GENERALE DE LA COOPERATION

Mr. Lassana KABORE

Adaptation Fund- National Authority Designed
Directeur Général.
de la Coopération du Ministère de l'Economie et des Finances
03 BP 7063 Ouagadougou 03 - Tel: +226 50 312550-Fax: (226) 25315409
Email: lassanekabore@financesgov.bf - chlaskab@yahoo.fr

MINISTRY OF ENVIRONMENT, SCIENCE, TECHNOLOGY & INNOVATION

Our Ref: .....

Tel: 0302 - 666 049
Fax: 0302 – 688 913/ 688 663

E-mail: info@mest.gov.gh
Website: www.mest.gov.gh

Republic of Ghana

Post Office Box M232
Ministries Post Office
Accra. Ghana.

.....

Private Mail Bag
Ministries Post Office
Accra, Ghana.

January 8th, 2015

The Adaptation Fund Board
C/O Adaptation Fund Board Secretariat
Email: Secretariat@Adaptation-Fund.Org
Fax: 202 522 3240/5

ENDORSEMENT FOR PROJECT "ENHANCING THE RESILIENCE TO CLIMATE CHANGE OF POPULATIONS IN WEST AFRICA BY PROMOTING THE DISSEMINATION OF PRACTICES OF CLIMATE SMART AGRICULTURE".

In my capacity as designated authority for the Adaptation Fund in Ghana, I confirm that the above regional project proposal is in accordance with the government's national priorities in implementing adaptation activities to reduce adverse impacts of, and risks, posed by climate change in Ghana.

Accordingly, I am pleased to endorse the above project/programme proposal with support from the Adaptation Fund. If approved, the project/programme will be implemented by Banque Ouest Africaine de Development (BOAD) in collaboration with the Economic Community of West African States (ECOWAS) and executed by the Directorate in charge of Environment in Ghana.

Kindly accept our assurances of highest esteem

HON. MAHAMA AYARIGA (MP)
MINISTER

ADAPTATION FUND

Letter of Endorsement by Govermnent of Niger

Niamey, 6th January 2016

To: The Adaptation Fund Board
Clo Adaptation Fund Board Secretariat
Email: Secretariat@Adaptation-Fund.org
Fax: 202 522 3240/5

Subject: Endorsement for Project "Enhancing the resilience to climate change of populations in West Africa by promoting the dissemination of practices of Climate Smart Agriculture".

In my capacity as designated authority for the Adaptation Fund in Niger, I confirm that the above regional project proposal is in accordance with the government's national priorities in implementing adaptation activities to reduce adverse impacts of, and risks, posed by climate change in Niger.

Accordingly, I am pleased to endorse the above project/programme proposal with support from the Adaptation Fund. If approved, the project/ programme will be implemented by Banque Ouest Africaine de Développement (BOAD) in collaboration with the Economic Community of West African States (ECOWAS) and executed by Conseil National de l'Environnement pour un Développement Durable of Niger in collaboration with ECOWAS Regional Agency for Agriculture and Food (RAAF).

Sincerely,

Dr KAMAYE Maâzou

Adaptation Fund- National Authority Designed

REPUBLIQUE TOGOLAISE
Travail Liberté Patrie

Ministère de !'Environnement et des Ressources Forestières

Direction de l'environnement

ADAPTATION F U N D

Letter of Endorsement by Government

Lomé, 6th January, 2016

To: The Adaptation Fund Board

C/o Adaptation Fund Board Secretariat
Email: Secretariat@Adatation-Fund.org
Fax: 202 522 3240/5

Subject: Endorsement for Project «Enhancing the resilience to climate change of populations in West Africa by promoting the dissemination of practices of intelligent agriculture".

In my capacity as designated authority for the Adaptation Fund in Togo, I confirm that the above regional project proposal is in accordance with the government's national priorities in implementing adaptation activities to reduce adverse impacts of, and risks, posed by climate change in Togo.

Accordingly, I am pleased to endorse the above project proposal with support from the Adaptation Fund. If approved, the project will be implemented by Banque Ouest Africaine de Développement (BOAD) and executed by Direction de l' Environnement du Togo with ECOWAS Regional Agency for Agriculture and Food (RAAF).

Sincerely,

Direction de l'Environnement

Thiyu ESSOBIYOU
Directeur de l'Environnement
Adaptation Fund National Designated Authority