



ECOWAS ENVIRONMENTAL ACTION PLAN

2020-2026

March 2020

Preface

The relationship between environment and development is very much at play in the ECOWAS region. Endowed with rich natural resources including land, water and a wide variety of flora and fauna, the resources are fast degrading as a result of the development aspirations of the growing population and climate change. Inappropriate and unplanned land uses, coupled with population pressure, have resulted in widespread deforestation and other forms of land and biodiversity degradation including extensive coastal erosion, soil acidification and fertility loss, extinction of wildlife, among others. The ECOWAS region experienced a very high deforestation rate between 2010 and 2020 estimated at 4.1 million ha through agricultural expansion and increased exploitation for forest products. The rapid population growth is increasing economic activities and urbanization which generate pollution and nuisances including atmospheric concentration of Greenhouse Gas.

The ECOWAS Commission, conscious of the delicate balance between the environment and development, has taken measures to promote the sustainable use and management of the region's natural resources as well as the avoidance and appropriate management of pollution by developing the ECOWAS Environmental Policy (ECOWEP) in 2008. Since its adoption by the Summit of Heads of State and Government in December the same year, the ECOWEP is guiding efforts to manage the environment sustainably in the West African Region. Implementation of the ECOWEP is designed to be incremental and through Action Plans prepared collaboratively and in consultation with the Member States and regional organizations that work primarily on the Environment and Climate Change.

Twelve years after the adoption of the ECOWEP, the environmental concerns persist and are increasing with emerging issues such as biotechnology, industrial disasters, coastal erosion, etc.

The globally agreed Sustainable Development Goals (SDGs) have created a new paradigm for better management of environment and natural resources. The Environmental Action Plan (EAP) (2020-2026) was developed with the support of the USAID funded West Africa Biodiversity and Climate Change (WABICC) Project to revise and update the first EAP. The revision was done to reflect emerging issues and current trends in environmental management, including effectively tackling climate change, conserving the regions natural capital: forest resources, wildlife and their habitats, soil and water resources, as well as addressing pollution, the plastic menace, hazardous chemicals and waste. The revised EAP was validated by national and

regional technical experts in May 2018 in Abuja, Nigeria and by the Sector Ministers of Environment in February 2020 in Ouagadougou, Burkina Faso. Subsequently, the ECOWAS Parliament gave a positive opinion of the Environmental Action Plan (2020-2026) for adoption by the ECOWAS Council of Ministers and endorsement by the Authority of Heads of State and Government.

It is my pleasure to call on all concerned to prioritize sustainable development in our region as we collaborate with Member States on our journey towards climate resilient and low-emissions development in West Africa. This will contribute to empower the region as well as the Member States not to be left behind other regions and other countries in the World.

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List of acronyms and abbreviations

AF	Adaptation Fund
AFD	French Development Agency
AfDB	African Development Bank
APHRC	African Population and Health Research Centre
CBD	Convention on Biological Diversity
CBLT	Lake Chad Basin Commission
CC	Climate Change
CESAG	African Centre for Higher Studies in Management
CIF	Climate Investment Fund
CILSS	Inter-State Committee for Drought Control in the Sahel
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
COP	Conference of the Parties
CTCN	Climate Technology Centre & Network
DENV/ECOWAS	ECOWAS Directorate for Environment
DFID	UK Department for International Development
DRR	Disaster Risks Reduction
EAP	Environmental Action Plan
EBSA	Ecologically and Biologically Significant Area
ECOWAS	Economic Commission for West African States
ENDA-TM	Environnement Développement en Afrique-Tiers Monde
EU	European Union
FCP	Convergence Plan for the Sustainable Management and Utilization of Forest Ecosystems in West Africa
FCPF	Forest Carbon Partnership Facility
GCF	Green Climate Fund
GEF	Global Environment Facility
GMV	Grande Muraille Verte
HAD	Humanitarian Affairs Department /ECOWAS
HCP	Hazardous Chemical Product
IAGU	Urban Development and Management Institute
IGECC	Intergovernmental Group of Experts on Climate Change
IGO	International Governmental Organization
IMWR	Integrated Management of Water Resources
IUCN	International Union for Conservation of Nature
LDCs	Least Developed Countries
MEA	Multilateral Environmental Agreements
NBA	Niger Basin Authority
NGO	Non-Governmental Organization
OMVG	Gambia River Basin Development Organization
OMVS	Senegal River Basin Development Organization
PES	Payments for Ecosystem Services
PMA	Protected Marine Area
POP	Persistent Organic Pollutant
RAMPAO	Regional Network of Marine Protected Areas of West Africa
RPDC	Regional Plan for Desertification Control
SFM	Sustainable Forest Management
SLM	Sustainable Land Management
SPR/WSC	Soil Protection and Restoration/ Water and Soil Conservation
TBO	Transboundary Basin Organization

TNA	Technological Needs Assessment
UEMOA	West Africa Economic and Monetary Union
UNCCD	United Nations Convention to Combat Desertification
UNECA	United Nations Economic Commission for Africa
UNFCCC	United Nations Framework Convention on Climate Change
VBA	Volta Basin Authority
WACA	West Africa Coastal Adaptation Program
WB	World Bank
WWF	World Wildlife Fund

EXECUTIVE SUMMARY

The Economic Community of West African States (ECOWAS) was established in 1975 and comprises 15 Member States covering an area of 5.1 million km², with a population of 308 million inhabitants as at 2015. Within the context of its objective of achieving the economic and political integration of Member States and faced with a serious degradation of natural resources and the entire environment which is undermining its long-term development, ECOWAS adopted a Common Environmental Policy (ECOWEP) in 2008 and developed an Environmental Action Plan (EAP) for the period 2008-2014 to implement this policy. However, new developments at the global, continental, sub-regional and national levels call for a periodic review of the EAP to take account of new or emerging issues.

In this regard, many recent scientific studies have highlighted the impact of climate change on West African economies due to their strong reliance on the primary sector (agriculture, fishing, livestock production, forestry resources) which in itself is very vulnerable to the impacts of climate change. In this context, preserving coastal areas which hold the bulk of marine biodiversity and a significant proportion of the population is of special significance. The same applies to fragile ecosystems such as mangroves, estuaries and islands. Similarly, the recent discovery of significant crude oil and gas reserves offshore in West African coastal areas is posing new threats in terms of varied pollution risks due to the intensive use of hazardous chemicals in this type of industry.

Besides, the rapid and unplanned increase in urban populations in West Africa with the attendant poor urban development and the proliferation of municipal and biomedical waste are increasingly becoming a topical issue which requires an urgent response due to the exposure of the urban population to multiple health and environmental risks.

Although most ECOWAS countries have signed on to international conventions aimed at improving the control and management of chemical products as well as protecting human health and environmental integrity, weaknesses in national legislative and regulatory mechanisms as well as the lack of technical and financial resources limit the effective implementation of provisions in these conventions. Populations and the environment are therefore exposed to high risks of chemical pollution.

All these challenges call for improved governance and capacity building. To this end, it is necessary to build the operational capacity of the ECOWAS Directorate of Environment, especially in terms of human and financial resources to enable it play a stronger leadership role

at the sub-regional level. In the same vein, ECOWAS must ensure a greater involvement of West Africa in international negotiations on MEAs, especially through capacity-building activities and consultations to better identify and defend the specific interests of the sub region. The improvement of environmental governance can also be achieved by promoting environmental monitoring mechanisms through a better access to and processing of data, improved mechanisms for the prevention of risks as well as natural, industrial and chemical disasters and the harmonization of legislative and regulatory frameworks to facilitate the implementation of integrated policies.

The preservation of forest, marine and coastal resources as well as biodiversity which constitute the economic production base of the majority of West African populations is an important strategic focus. To achieve this objective, there is the need to implement major forest management plans which include value addition to ecosystems goods and services for the benefit of local populations. Similarly, emphasis will be laid on land erosion control, the preservation of river basins, fertile lowlands, promotion of agroforestry and desertification control while improving agricultural land productivity through the restoration of fertility.

As regards the marine and coastal environment, the aim will be to strengthen resilience to climate change impact, prevent the degradation of coastal areas, especially the most vulnerable sites such as mangroves, estuaries as well as islands, improve fisheries productivity and conserve biodiversity, among others, through the promotion of Protected Marine Areas.

Concerning the management of chemical products, hazardous waste and nuisance, ECOWAS will seek to improve and integrate regulatory mechanisms by bringing them up to international standards and support Member States for their effective implementation as well as develop synergies between Member States for sharing available technological resources and a better control over inter-state trafficking of these substances. Also, capacity building for toxicology centers will be envisaged and new centers will be established to promote surveillance and technological innovation in order to provide substitutes that are less harmful to humans and the environment.

The household and biomedical waste sector is lacking key basic information. This explains why demonstration programs will be deployed to test the most suitable information models while developing action-research modules to bridge the relevant information gap and establishing the appropriate legal and fiscal contents for a sound and sustainable waste management in urban areas in West Africa. At the same time, the introduction of environment modules in

primary and secondary education will aim at a long-term qualitative change of mentalities among the youth and ensure sustainable eco-consciousness among citizens. Also, teaching and research will be promoted in the emerging sectors where the sub-region lacks experts.

The urgency of issues addressed in the EAP, their importance for the preservation of the economic production capital of Member States as well as the alarming exposure of West African populations to hazards to their health and welfare require substantial resources that measure up to the ambitions. In this regard, the ECOWAS Commission need to financially support the Directorate of Environment for an effective implementation of the Action Plan. This is the first major risk to the coherent implementation of the EAP. However, the Environment Directorate must search for its own means of action through an efficient partnership and fundraising policy.

The second major risk concerns Member States' commitment and will to comply with ECOWAS directives on improvements required in environmental legislative and regulatory frameworks.

The successful implementation of the action plan would essentially have the following effects: an improvement in sub-regional environmental governance and greater efficiency in international negotiation bodies; (ii) mainstreaming of environmental policies and regulations at the sub-regional level; (iii) greater solidarity among countries for resource sharing to address risks associated with natural, industrial and chemical disasters, (iv) long-term preservation of forest, marine, coastal and biodiversity resources through improved technical management conditions and a more responsible behavior of well sensitized and educated West African citizens.]

1 GENERAL INTRODUCTION

The Economic Community of West African States (ECOWAS) was established in 1975 by 15 Member States¹. Its objective is to “to promote co-operation and integration, leading to the establishment of an economic union in West Africa in order to raise the living standards of its peoples, and to maintain and enhance economic stability, foster relations among Member States and contribute to the progress and development of the African Continent”.

The community thus established covers an area of 5.1 million km². Its population estimated at 308 million inhabitants in 2015 (ECA, 2016) is very youthful as in most Member States, over 40% of the inhabitants are less

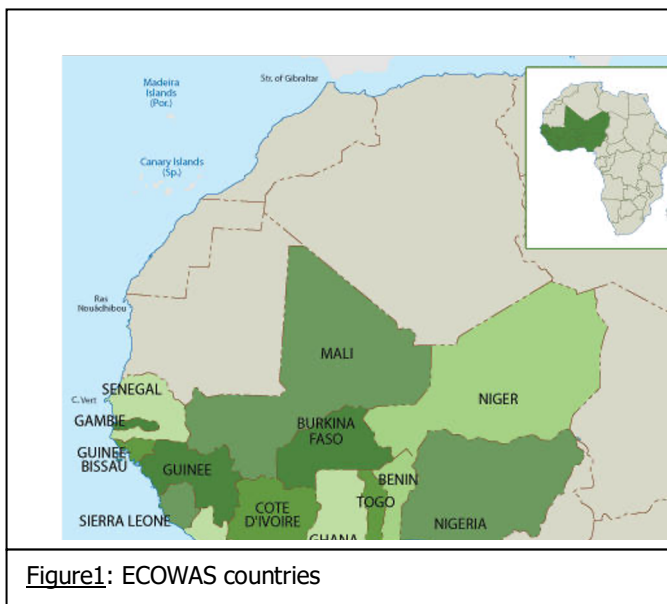


Figure1: ECOWAS countries

than 15 years. Population growth in the region is very high with rates ranging between 2 and 3% (Gemenne, 2014). Currently, poverty is a major challenge facing countries in the region with a human development index among the lowest in the world. Eleven Member States are among the last 22 in the UNDP Human Development Index ranking (Gemenne, 2014).

ECOWAS aims to promote economic and political cooperation between Member States. Its territory is endowed with significant environmental resources but is facing constraints in many areas. This explains why ECOWAS developed in 2008 a community environmental policy to ensure a rational and sustainable management of the environment and natural resources. This policy is the reference framework for this Environmental Action Plan for the period 2020-2026.

2 ENVIRONMENTAL CONTEXT

The analysis of natural and environmental resources of ECOWAS countries takes into account, under this EAP, forest resources and biodiversity, surface and underground water resources, marine and coastal resources in addition to the demographic factor.

¹ Benin, Burkina Faso, Cape Verde, Côte d'Ivoire, Gambia, Ghana, Guinea, Guinea Bissau, Liberia, Mali, Niger, Nigeria, Sierra Leone, Senegal and Togo

Forest resources and biodiversity: The West African Economy depends largely on agriculture, livestock production, which are the main livelihood activities, as well as living resources extracted from the forest (wood, products from gathering and hunting, etc.) which help meet the food, medicine and energy needs of rural and urban populations. Forest resources are relatively limited. In fact, forest and wooded lands cover a total area of 72.1 million hectares (i.e. 14% of lands), including 4.2 million hectares of primary forest, 66.2 million hectares of secondary forest and 1.7 million hectares of forest plantations. Protected areas cover 27.7 million hectares (ECOWAS, 2013).

Unfortunately, these resources are exposed to deforestation and degradation at an alarming rate. The second UNEP report on the State of Biodiversity in Africa indicates that over 3 million hectares of natural habitats are converted each year mainly due to deforestation and forest degradation resulting from commercial and subsistence farming, timber extraction, urbanization and the emerging expansion of biofuel plantations (UNEP, 2016). Similarly, the FAO report on global forest resources assessment (FRA, 2010) highlights the loss of forest cover to the tune of 870,000 hectares between 2000 and 2010, representing a decline of 1.9% per annum. These data were corroborated by Ariori and Ozer in their studies on the state of 44 forests in West Africa which indicate a decline of 2% in the area of forests studied.

Africa has a remarkable biodiversity which includes the most intact sets of large mammals on earth. However, the second UNEP report on the State of Biodiversity in Africa shows that the number of species is declining and threats to these species are increasing. In 2014, a total of 6,419 animal species and 3,148 plant species were listed among species facing extinction on the “IUCN Red List”. The same applies to 21% of all fresh-water species. This report also indicates that 45% of fish species and 58% of fresh-water plants are overexploited according to IUCN data as well as a decline in bird populations in the last 25 years based on Bird Life International data. Overall, it is estimated that the population of African vertebrate species for which data are available declined by 39% since 1970. The reduction is reported to be faster in West and Central Africa compared to Eastern or Southern Africa (UNEP, 2016).

The gradual loss of biological diversity through deforestation and degradation of the forest and livestock resources is a major environmental threat in West Africa. The main causes of deforestation/ degradation of natural environments are anthropogenic. These include wanton harvesting of firewood, lumber and timber, recurrent bushfires, extensive farming resulting from the impoverishment of soils and low yields, itinerant livestock production and overgrazing as well as political, legal, institutional, technical and economic constraints. For the continental

aquatic systems, added to these are water pollution due to excess nutrients, industrial and domestic organic load, pesticides and heavy metals as well as the impacts of invasive species.

However, the climatic deterioration which is manifested by a gradual decline in rainfall and drought crises observed in the 70s and 80s undoubtedly worsened the phenomenon.

The deforestation phenomenon leads to the degradation of the quality of forests and biodiversity erosion. Ariori and Ozer (2005), citing several sources, indicate that in northern Burkina Faso (Kolèl), the near total disappearance of dense savannah occurred between 1955 and 1974 (declining from 73% to 4% of the area studied) and this was reduced to a steppe with discontinued woody vegetation cover (from 25% to 86%). In 1990, as much savannah as steppes gave way to a near desert-like landscape. Similarly, in the Guinth Pâté (454 km² in the groundnut basin in Senegal), the forest savannah (227 km²; 49.9%) and wooded savannah covered 88% of the territory in 1954. Eleven years later, the forest savannah has completely disappeared and the wooded savannah accounted for 24.1% of the study area whilst savannah shrub lands began to appear and covered more than half the territory (56%). In 2000, wooded savannah and savannah shrub lands shared respectively only 8.4% and 48% of the study area. These studies also show 30% erosion of biodiversity between 1945 and 1993 in areas covered by the study in Senegal.

Dense and semi-dense forests in West Africa are recognized as some of the richest in the world in terms of wildlife. They are home to a great proportion of endemic species that are much more important than those in Sudanese Sahelian and Sahel-Saharan savannah areas. These endemic species include primates, namely endemic *Cercopithecus diana roloway*, *Cercocebus atys* in Ghana and Cote d'Ivoire, the Gorilla sub spicy, *Gorilla gorilla diehli*, found only in Nigeria and Cameroon and Jentink's duiker (*Cephalophus jentinki*) found in Cote d'Ivoire and Liberia. With regard to bird life, there are many examples such Gola malimbe (*Malimbus ballmanni*), yellow-casqued hornbill (*Ceratogymna elata*). The Tai national park alone, for instance, shelters 24 endemic bird species in the West Africa Guinea Forest (ECOWAS, 2012). Reptiles and amphibians, including endangered species, colonize all ecosystems but these groups are rarely studied. These groups include tens of endemic species like the amphibians *Phrynobatrachus taiensis* and *Bufo taiensis* specific to the Tai Forest in Cote d'Ivoire (ECOWAS, 2012).

The combined effect of several factors both natural (climate decline) and man-made (hunting, bushfires, land clearing for agriculture) has led to the decline if not the extinction of many animal species. This is how the populations several mammal species like the sassaby

(*Damaliscus lunatus korrigum*) and Derby eland (*Taurotragus derbianus*) have declined while species such as the black rhinoceros (*Diceros bicornis longipes*) have disappeared in the region. Other species have probably disappeared or threatened with extinction like the bongo (*Boocerus euryceros*). Similarly, populations that were in the past evenly distributed across the region have been reduced to a single population. This is the case with the West Africa giraffe (*Giraffa camelopardalis peralta*) which was widespread in Senegal and Chad and is now found only in Niger, mainly in the southern part of the country (ECOWAS, 2012).

Nonetheless, all ECOWAS countries are parties to the Convention on Biodiversity and have developed a national strategy document on biodiversity conservation. However, UNEP has deplored gaps identified in the implementation of these policy documents due mainly to inadequate institutional, financial and technological resources as well as lack of data to monitor biodiversity. The establishment and management of natural parks and wildlife protection areas have proven to be among the most effective strategies for the conservation of plant and animal biodiversity since the colonial era. These protected areas are of special importance in the West Africa region where they serve as the major reservoir of wildlife. In addition to national parks and reserves that are primarily dedicated to the conservation, there is a dense network of classified forests and other protected areas (like sacred forests) that may also shelter animals but their primary objective is the conservation and/or rational and sustainable use of plant species. Some protected areas have a special status under international conventions which facilitate technical and financial support. These include: Biosphere Reserves are areas recognized under the UNESCO Man and Biosphere Program (MAP) which aims to promote sustainable development based on local community initiatives and science; world heritage sites are natural and cultural sites of exceptional universal value and Ramsar site are recognized wetlands of international importance.

West Africa holds 24 protected areas with special status covering a total area of 34.890.880 hectares (ECOWAS, 2012) including the Air and Tenere Park of Niger which account for 70% of this area. Mali, Senegal and Cote d'Ivoire are other countries that host the largest area of protected zone. The figure above and the table below present the network of protected areas in West Africa.

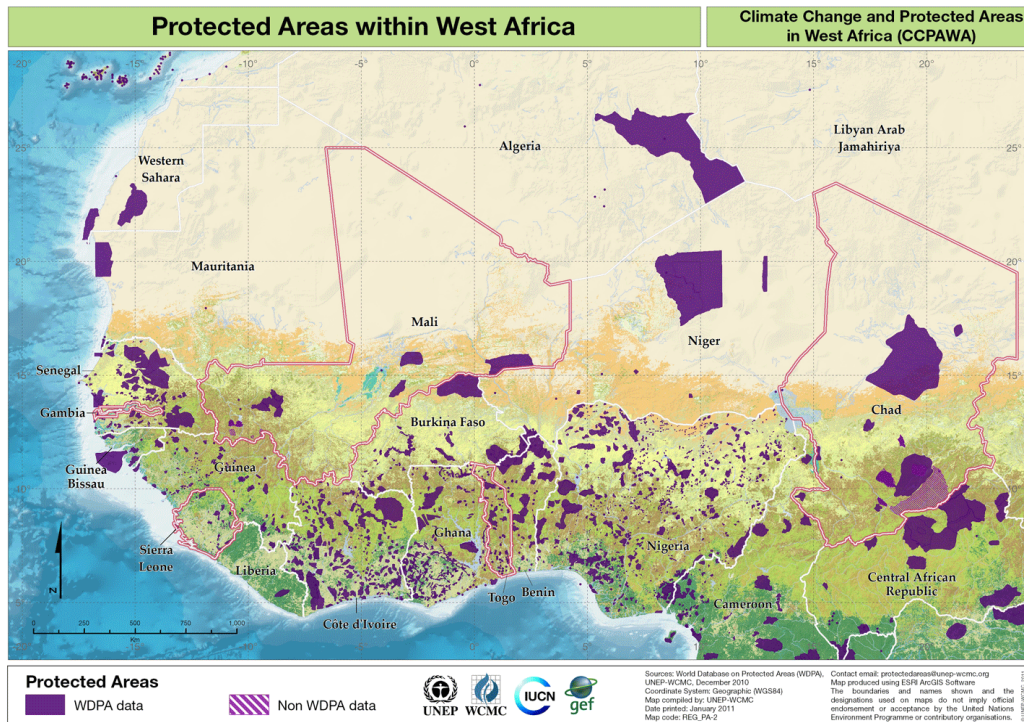


Table 1: List of protected areas with special status in the region

Protected area	Country	Status	Area (ha)
Pendjari	Benin	BR	452,700
W Benin	Benin	BR	795,280
W Burkina Faso	Burkina Faso	BR & RAMSAR	316,000
Mare aux hippopotames	Burkina Faso	BR & RAMSAR	19,200
Comoé	Côte d'Ivoire	BR & WR	1, 150, 000
Taï	Côte d'Ivoire	BR & WH	620, 000
Bia	Ghana	BR	7, 770
Songor (2011)	Ghana	BR	51,113
Boloma Bijagós	Guinea Bissau	BR	101,230
Monts Nimba	Guinea Conakry	BR	145,200
Massif du Ziama	Guinea Conakry	BR	119,019
Badiar	Guinea Conakry	BR	284,300
Upper Niger	Guinea Conakry	BR	647,000
Boucle de Baoulé	Mali	BR	2,500,000
Aïr & Ténéré	Niger	BR & WH	24,400, 070
W Niger	Niger	BR - WH & RAMSAR	712,000
Omo forest reserve	Nigeria	RB	130,600
Ferlo	Senegal	BR (2012)	1, 150, 000
River Senegal Delta	Senegal (& Mauritania)	BR	641,768
Saloum Delta	Senegal	BR & RAMSAR	180,000
Niokolo-Koba	Senegal	BR & WH	913,000
Samba Dia	Senegal	BR	756
Parc national des oiseaux du Djoudj	Senegal	BR	16,000
Oti-Kéran / Oti-Mandouri (2011)	Togo	BR	179,000

(Source ECOWAS, 2012) Legend: BR: Biosphere Reserve; WH: World Heritage

These terrestrial protected areas coexist with a network of 20 marine protected areas (MPAs) which were recently established, in 1976 to be precise. They cover a relatively limited area of 581,400 hectares and are found only in Gambia, Senegal and Guinea Bissau. The MPAs play an important role in the protection and reproduction of indigenous or migratory species and contribute to fishing regulation. The number of MPAs and their relatively reduced area suggest that they do not cover the entire marine and coastal biodiversity in West Africa. However, the Network of Marine Protected Areas in West Africa has developed a regional strategy for marine protected areas in West Africa with the vision to expand the existing network and to promote its participatory management through strong institutions for a greater contribution to sustainable development in the region and an improvement in cultural and natural diversity.

In all, people's strong reliance on agriculture and natural resources has led to an increased vulnerability to environmental changes which themselves exert tremendous pressure on natural resources. Crop failures due to recurrent drought are compensated with an increased exploitation of natural resources (forest, fishing, biodiversity products), often beyond the natural possibilities, thus leading to a vicious circle of degradation of these resources.

Poverty among the populations, rapid population growth and the persistence of harmful practices make it difficult to foresee in the medium term the reversal of the quantitative and qualitative regression curve of forests. Rather, the ECA (2016) is projecting a deceleration of economic activity (4.4% in 2015 against an average rate of 6% in the period 2010 -2014).

Moreover, forest resources and biodiversity remain the only means available for the population to deal to the uncertainties associated with low yield agriculture and livestock production. There is therefore the need to envisage far-reaching measures.

Surface water resources: Taberly (2008) made quite an exhaustive survey of 28 transboundary river basins in West Africa which cover 76% of the region's total area. The most important ones are the Niger (shared by 11 countries), Senegal (4 countries), Volta (6 countries), Lake Chad (8 countries) Comoe (4 countries). With the exception of Cape Verde, each West African country share a water body with one of its neighbors. These river basins cross national boundaries, hence the need for cooperation between countries for a consensual management and equitable sharing of these resources, especially through transboundary river basin authorities (or Transboundary Basin Organizations – TBO) that are expected to ensure responsible management of water resources among riparian countries for sustainable development.

Ground water resources. Water resources are in diverse forms: surface water tables which are generally renewed during the rainy season, water tables of ancient bedrock and deep groundwater from sedimentary basins. Underground water resources are often shared among several countries (map opposite). Their potential, estimated at several thousands of billions of cubic meters, is huge and sufficient to meet the current and future needs of West Africa (Taberly, 2008). However, their depth, reaching sometimes two thousand meters, presents technical and financial constraints which limit their availability. These are often non-renewable resources (fossil water). Overall, the hydrological potential of West African countries is quite abundant for all the countries, with the exception of Burkina Faso which is below the international standard (1,700 cubic meters of renewable fresh water per year per person) and Cape Verde which is below the scarcity threshold of 1,000 cubic meters per year (Taberly, 2008). Ground water contributes to a large extent to meeting the water needs of populations in terms of feeding and watering livestock and irrigation. Sedimentary basins near the surface of major rivers are mostly harnessed for this purpose. The very low level of extraction (11 billion cubic meters against a potential of 1,300 billion cubic meters, meaning less than 1% (Taberly, 2008) is a constraint to achieving agricultural development objectives of the region. These extractions are meant for agriculture (75%), domestic consumption (17%) and industry (7%).

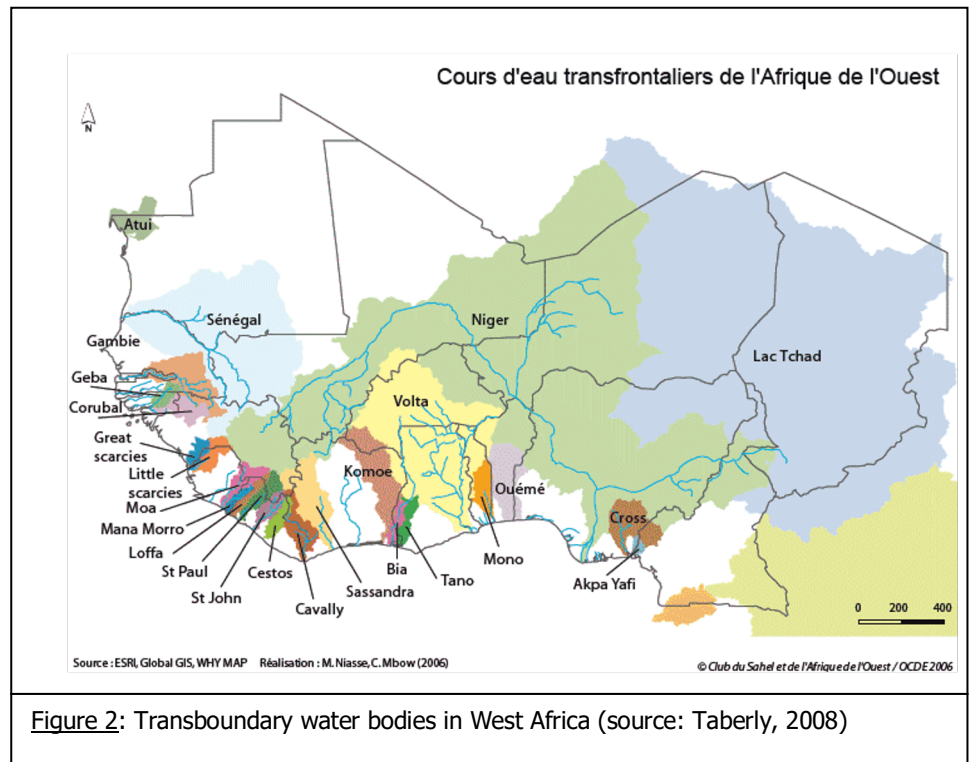


Figure 2: Transboundary water bodies in West Africa (source: Taberly, 2008)

However, water resources have been on a constant decline throughout the second half of the last century due to the combine effects of dwindling rainfall and annual flow of water bodies, changes in land occupation and use, population growth and accelerated urbanization which create higher water demand. According studies based on climate predictions, the flow of major water bodies could reduce further by 20 to 40% by 2054 (USAID, 2013) with its attendant

increased water stress which will affect many areas along rivers, especially agriculture and fishing.

Against this backdrop, the sustainable management of water resources will further require an integrated (Management of Water Resources (IMWR)) approach which aims to manage both surface and ground water supply in a holistic manner while seeking to strike a balance between demand and supply.

Coastal resources and vulnerability. The West African coastal area stretches over nearly 4,400 km, from the shores of Mauritania to the barrier beaches of the Gulf of Guinea (Diop without date). It is made up of various types of habitats including meadows of algae in the north, rocky cliffs, extensive sand beaches, estuaries and mangroves in the south. The coastal area is home to over 1,000 species of fish as well as other crustaceans, including dolphins and whales, five endangered species of sea tortoise and colonies of monk seals in hundreds (Diop, without date). The Cape Verde archipelago holds one of the most important coral reefs of West Africa. The area is also a center of endemism not only due to rare and unique species that are found there, but also the 10 leading “hotspots “in the world for communities of deep coral reefs where conservation actions are proving more necessary than ever before (Diop without date).

These coastal areas are home to the greatest part of the West African populations, ports and fisheries infrastructure, with over 1.6 million tons of annual regular fish catches estimated at a wholesale value of over USD 2.5 billion and industrial units generating many risk factors such as overpopulation, industrial and chemical pollution, overexploitation of mangroves which lead to the degradation of habitats and biodiversity erosion.

The same applies to fresh water ecosystems threatened by recurrent drought and rainfall deficits, inappropriate fishing techniques, pollution by organic matter, contaminations due to pesticides and heavy metals. These are enough stress factors that result in a reduction of water bodies, invasion by aquatic plants and loss of biodiversity (UNEP). To these are added the effects of climate change which pose undeniable risks of ecosystem degradation with the rise of water levels in deltas and sea inlets, salinization of coastal lands, the proliferation of invasive aquatic plants, loss of marine and coastal biodiversity and depletion of fisheries resulting in the extinction of some species, degradation of fishing infrastructure and, for that matter, the rapid impoverishment of populations.

The last GIEC report (IPCC) projects temperature increases of 3 to 5°C in most African regions by the end of the century and stresses further that in Sub Saharan African coastal and delta regions

as well as small island states will be the most affected by climate change. Among the African port cities that are the most exposed to the rising sea level, six are located in West Africa, namely: Lagos, Abidjan, Lome, Conakry, Dakar and Accra (Gemenne, 2014). Cotonou and Nouakchott are also very vulnerable to the rising sea level. This sea level rise caused by climate change is expected to change, by the end of the century, the topography of the 400 km stretch of coastline in West Africa where many cities are likely to disappear under the waters (USAID, 2013). The rise in the sea level by 0.5 to 1 meter would have dramatic effects on all coastal towns and the hinterland. The Intergovernmental Group of Expert on Climate Change (IGECC) initially expected a rise of 18 to 59 cm in the sea level by the end of the century in 1999 before refraining from giving a limit to the value of the projected rise of the sea level in its report published in November 2007. The level of shoreline retreats of 4.5 to 88 cm by 2100 is expected. This will lead to a permanent flooding of natural habitats and big cities (Gemenne, 2014). In fact, a 2 cm rise in the sea level per annum is enough to devastate large tracks of land in the fragile coastal areas of West Africa, especially in densely populated delta areas (USAID, 2013).

In addition, there are latent risks of pollution from the exploitation of offshore gas and oil resources in the region as well as the transit of these products off the West African coastal areas.

Chemicals, waste and nuisance are also environmental issues of major interest. In fact, harmful chemical substances are key elements of our economic life and form part of products used in essential productive sectors such health (pharmaceuticals, insecticides), agriculture (pesticides, fertilizers), livestock production (animal care), etc. However, their misuse and life cycle expose human health to serious risks. In this regard, WHO estimates at 4.9 million (representing 8.3% of the world total) the number of deaths attributed to pollution caused by harmful chemicals (UNDP, 2015). Similarly, they cause the pollution of soils, water bodies, ground water and the degradation of arable lands with negative effects on livelihoods in sectors such as agriculture, fisheries and livestock production. With regard to nuisance, public authorities must pay greater attention to electronic radiation resulting from the development of mobile telephony to reduce the exposure of the population, especially children and the youth whose bodies are particularly sensitive to this type of nuisance. The same applies to noise which is undoubtedly covered in most regulations, but standards adopted are hardly observed. Besides, services in charge of surveillance generally lack measuring equipment.

Even though most West African countries have signed the relevant international conventions, including the Stockholm convention on POPs , Basle Convention on the control of transboundary movements of hazardous wastes and their disposal, the Bamako Convention

which prohibits the importation into Africa of hazardous and radioactive waste from third parties or the Minamata Convention aiming to reduce the use of mercury, they are still vulnerable due to weaknesses in the legal and institutional frameworks for the management of hazardous chemicals. Indeed, the lack of qualified personnel, well equipped centers of toxicological expertise and competent administrative personnel to identify and control the transportation and trading of chemicals as well as inadequate financial resources are issues that characterize the management of HCPs in all ECOWAS Member States. There are also weaknesses in existing data bases and their interconnection; gaps in systems meant to educate and sensitize populations on risks associated with chemical products; lack of sound environmental management practices in handling waste from care activities and contaminated packaging.

This situation may worsen in the coming years due to the prospects of developing extractive industries thanks to large reserves discovered across West Africa in addition to existing gold and phosphate mines, among others. Yet, the extractive industry entails serious pollution and environmental nuisance risks as a result of the abuse of hazardous chemicals.

All these risks expose populations and the environment to the negative effects of hazardous chemicals and require initiatives at the community level for a concerted strategy to deal with the issues.

The challenge of household waste: According to UN-Habitat, the population in West Africa is expected to reach 550 to 600 million inhabitants by 2050 (Gemenne, 2014). Besides, with 5% of the world population and an area covering 40% of Sub Saharan Africa, West Africa is the most densely populated region of the continent. This is compounded by the strong growth of the urban population which is also a source of concern. UN-Habitat estimates the urban population growth at 5 to 7% against 2.3% at the continental level (UNEP, 2016).

This rapid and unplanned growth is obviously raising numerous issues, including sanitation, solid and liquid waste disposal and its attendant health problems. In fact, household solid waste collection and disposal are a major challenge for the living environment and health of the population. Nearly 9,000 tons of waste are generated daily in Lagos, and 2,000 tons in Dakar (Esther, 2012). Poor management of such quantities of waste will definitely have harmful environmental and health consequences. Generally, waste is collected using carts or articulated dump trucks and piled at an assembly point at the outskirts of urban areas or dumped at dumping sites in the wild without any infrastructure. In addition to the human

factor, this situation stems from problems associated with urbanization and the development of residential areas at the outskirts of cities as well as the inadequate technical and financial resources allocated to waste management (Dieng, 2015). Besides, the fiscal system is ill-adapted and often obsolete and the legal and regulatory framework is often summary and is hardly applied.

Overall, the result is a strong trend toward the degradation and worsening of natural (climate hazards) and human (high population growth, intense exploitation of natural resources, bushfires) factors that affect natural resources and the environment as a whole. Consequently, the ECOWAS region is facing many environmental problems and is exposed to the impacts of climate change, desertification and land degradation. It is also experiencing many disasters, especially floods and droughts, which according to climate predictions, are expected to be more frequent and intense due to global warming.

This situation has prompted ECOWAS to consider sustainable development and the conservation of natural resource as a cross-cutting issue in its Vision 2020 which provides the structure for the integration policy as well as economic and social development within the space. This explains why, by 2008, ECOWAS had developed an environmental policy with a diagnosis which objectively identified the factors of environmental degradation and proposed strategic areas of intervention. Since then, some issues have worsened and others have emerged. These include particularly the degradation of coastal and marine resources, biodiversity erosion, multifaceted impacts of climate change, health risks associated with waste management, etc.

The environmental challenges facing the sub region are undoubtedly numerous with some more urgent than others and this could lead to disjointed actions. Given the magnitude of the issues at stake, such a strategy is bound to fail. This explains why the ECOWAS Directorate of Environment decided to adopt a methodical approach that will help make an informed choice of issues that will be gradually resolved through planned actions in time and space and reverse the regressive trends observed in some strategic sectors. This approach which forms part of the five-year Action Plan aims to prioritize issues and mobilize the financial resources and partnership required to address them adequately. In addition, it will help update priorities identified based on changes occurring within the regional or global context.

3 MANDATE / MISSION OF THE COMMISSION IN THE MANAGEMENT OF THE ENVIRONMENT AND NATURAL RESOURCES

Article 3.1 of the Revised ECOWAS Treaty provides that “ *the Community aims to promote co-operation and integration, leading to the establishment of an economic union in West Africa in order to raise the living standards of its peoples, and to maintain and enhance economic stability, foster relations-among Member States and contribute to the progress and development of the African Continent*”.

Paragraph 2 and 3 of the same article 3 specify that “ in order to achieve the aims set out in the paragraph above, and in accordance with the relevant provisions of this Treaty, the Community shall, by stages, ensure; : (i) the harmonisation and co-ordination of national policies and the promotion of integration programmes, projects and activities in the various development sectors, and (ii) the harmonisation and co-ordination of policies for the protection of the environment”.

In the environmental sector, the mandate is complemented by chapter six of the treaty which deals with cooperation between Member States through the provisions of article 29, 30 and 31 of the Revised Treaty. To these are added other areas of cooperation resulting from: (i) Multilateral Environmental Agreements (MEAs) that Member States have ratified; (ii) major international conferences; (iii) continental decision of the AMECEN and African Union; (iv) Rules and directives and other forms of commitments made by Member States. After due analysis, it appears generally that in a bid to contribute to regional integration, the Community’s mandate in the area of environment revolves around the following points : (i) harmonization of environmental policies, regulations and standards and the coordination of their implementation; (ii) promotion of programmes, projects and activities in the various areas of environment and natural resources; (iii) coordination and monitoring and evaluation of the implementation of programs; (iv) capacity building and promotion of decision making tools; and (v) mobilisation of technical and financial resources.

4 REMINDER ON THE ECOWAS ENVIRONMENTAL POLICY

ECOWAS authorities have defined a Vision 2020 which aims to transform the community space into “a borderless region where citizen can benefit from opportunities and harness in a sustainable manner the huge resources of the region”. The vision for the environmental policy that flows from it is “a peaceful, dignified and prosperous ECOWAS region whose various and productive natural resources are preserved and managed on a sustainable basis for the development and equilibrium of the sub-region. To that effect, production, processing, consumption, trading and disposal activities are controlled and managed in a healthy environment, from the point of view of raw material flows, waste and final processes.”

The overall objective of the ECOWAS Environmental Policy adopted by Supplementary Act A/SA.4/12/08 of 12 December 2008 is “to reverse the environmental degradation and depletion of natural resources, ameliorate the quality of the living environment, conserve biological diversity, with a view to ensuring a healthy and productive environment; thereby improving the well-being of the ecosystem and the population of the sub region”.

This policy is structured around the four (4) strategic lines of action below:

- i. Strengthening of Environmental Governance (setting up of a sub-regional mechanism) and development of capacities to that effect;
- ii. Promotion of sustainable management of resources to improve the sub-regional economy in an environment friendly manner;
- iii. An organized fight against environmental pollution and nuisance, urban waste and control over the movements of hazardous waste/products in the economy;
- iv. Promotion of information, education, and communication for a healthy environment.

An implementation Action Plan for the policy was developed and technically validated in November 2008. The implementation covered the period 2008 – 2014 at the end of which there should be at least an update or review of the environmental policy and its Action Plan.

5 STATUS REPORT ON THE MANAGEMENT OF THE ENVIRONMENT BETWEEN 2008 AND 2017

The table in annex 1 provides, for each strategic objective of the 2008 -2014 Action Plan, activities carried out. The assessment of the implementation of the first strategic line of action under the Action Plan “strengthening environment governance” revealed the following:

- Capacity building workshop activities were organized by ECOWAS to build the capacity of West African negotiators within the framework of the international convention on climate change;
- the Monitoring for Environment and Security in Africa (MESA) Program was implemented;

The second strategic line of action concerning « the Promotion and sustainable management of resources » helped in launching the process known as “Forest Dialogue” which was executed/implemented? with the support of FAO and other partners through the development of the “Forest Convergence Plan for the Sustainable Management and Utilization of Forest in West Africa” which is now the strategic reference document on this issue. This process which began in 2010 ended in 2015.

In this context, the ECOWAS Directorate of Environment conducted an important study on the legal framework for the sustainable management and utilization of forest ecosystems in West Africa. This study makes a comparative analysis of legal mechanisms for the management of forest ecosystems in ECOWAS Member States and conflict resolution mechanisms, identifies stress factors and proposes measures for the harmonization of legislative and regulatory frameworks across the community for a better management of forest resources and biodiversity.

In the same vein, the Directorate of Environment conducted an important study to take account of the climate change dimension in the management of natural resources and the environment. This study led to the preparation of a document which helped analyze the vulnerability of West African to climate change and propose strategies and action plans to reduce this vulnerability. Furthermore, capacity-building workshops were organized for West Africa climate negotiators as part of preparations for the COP 21 held in Paris.

The other activities planned under the second strategic line of action were not implemented.

Concerning the third strategic line of action relating to « pollution, nuisance and waste control », the Directorate of Environment developed a regional intervention document for the management of hazardous chemicals. A sub-regional project to improve plastic waste

management is also being finalized. Other activities under this strategic line of action were not implemented.

Finally, the fourth strategic line of action on “the promotion of information, education and sensitization” none of the activities was carried out.

The strategic documents listed above are part of the strategic line of action described in the ECOWAS Environmental Policy. Annex 1 provides for each line of action of the environmental policy the strategic objectives that were taken into account as well as issues that were addressed.

On the whole, there has been a low level of implementation of activities planned under the 2008 -2014 EAP. The major activities carried out concerns the preparation of strategic plans and capacity-building workshops. The sector action plans were also not followed by concrete programs and projects on the field. This is mainly due to the human resource deficit at the Directorate of Environment and inadequate financial resources. It is therefore important to enhance the structure of the various divisions and provide them with the technical personnel capable of developing and implementing projects based on the focus areas defined in the Action Plan. Where the need arises, private research firms could be an option to deal with the technical skills deficit in some areas and accelerate actions in order to achieve the set objectives.

Similarly, the fundraising function required to mobilize financial resources commensurate with the ambitions is not taken into account in the operations of the Directorate of Environment. It must be provided with more internal financial resources, on the one hand, and assisted to develop a more aggressive external financial resource mobilization, on the other, to be able to implement identified programs.

In addition, as part of the implementation of the environmental policy, the ECOWAS Directorate of Environment developed several sector documents, including:

- The Sub Regional Action Program to Reduce Vulnerability to Climate Change (SRPA/CC) whose main objectives are to: i) build the technical and scientific capacity of the sub region to reduce vulnerability to climate change; ii) promote the integration of climate change dimensions into development policies, strategies, program and projects at sub-regional and national levels; and iii) develop and implement sub-regional and national programs and projects on adaptation to climate change.

The Monitoring for Environment and Security (MESA) Program aims to improve the capacity of regional and national institutions of the ECOWAS region as well as Mauritania and Chad involved in the management of the environment to make better use of earth observation data for a more efficient management of water, agriculture and livestock production. The major beneficiaries are government technical services as well as national and regional institutions responsible for monitoring the environment, African and international researchers. The program was funded by the European Union under the 10th EDF to the tune of 2,500,000 Euros for a period of 36 months. MESA uses earth observation and satellite technologies to generate essential products and information services for socio-economic development. The program has three main components: the Crop Unit responsible for monitoring the state of crops (ahead or behind in the installation, state of satisfaction of water needs) and yield prospects for early warning on food security; the pastoral unit responsible for monitoring pasture conditions (vegetation, above or below average, potential production of the fodder biomass), surface water points (commencement and drying up) to facilitate decision-making; and the Bush Fire Unit which provides indications on fire risks (risk prone areas before the fire), surveillance of active fires and assessment of burnt areas for better decision making in the field of environmental management.

- The Convergence Plan for the Management and Utilization of Forest Ecosystems in West Africa (FCP) with the following key strategic objectives: i) the harmonization of forest legislative and regulatory frameworks as well as policies; ii) improvement of knowledge on the state and dynamics of forest ecosystems; iii) promotion of forest ecosystem management and reforestation; iv) biodiversity conservation; v) value addition to ecosystem goods and services; vi) promotion of research on forest and development and finally vii) information, education and communication.

West African forests support many productive socio-economic activities and provide substantial environmental services. However, they are under enormous internal and external pressure due to rapid population growth and climate factors. To stem the deforestation and degradation of ecosystems, what is required is the sustainable management of forests through an integrated approach with diverse partners from sectors other than the forest sector. The FCP aims to ensure a sustainable management of forests to safeguard biodiversity which is of global economic and environmental importance and reduce poverty as it provides a wide range of products and services for present and future generations.

The convergence plan helped to:

- Review legal, regulatory and institutional documents prepared at the national level to ensure a common vision in the sustainable utilization and management of forest ecosystems;
- Assess legal and institutional instruments within the context of a decentralized management of natural resources;
- Identify and analyze biodiversity conservation and the management of protected areas;
- Propose modalities for assigning powers and responsibilities to communities in the management or joint management of natural resources in order to take account of the specificities of the various stakeholders;
- Propose appropriate measures and arrangements to secure access to land both in terms of traditional practices and modern land regulations.

This FCP also contributed to the review of major constraints to the sustainable management of forest ecosystems in West Africa and on that basis, proposed a solid foundation for the development of national and transboundary projects on the sustainable management of agriculture, forestry and livestock systems.

- The Sub Regional Program for Desertification Control in West Africa which aims to: i) improve living conditions and food security in arid and semi-arid areas in West Africa; ii) enhance the state of transboundary ecosystems and/or shared ecosystems; and iii) establish efficient relations at the local, national, regional and international levels to accelerate the implementation of the CCD at national and sub-regional levels. The major pillars of the plan concern i) the sustainable management of water resources; ii) management of fragile ecosystems, production areas, and biodiversity conservation areas; iii) promotion of new and renewable energies and energy-biomass management; iv) control pest that affect crops and forest species; v) early warning and reduced vulnerability to climate change; vi) scientific and technical cooperation and knowledge management; and vi) capacity building.

- The Sub Regional Program for the Management of Hazardous Waste which is essentially designed to: i) reduce if not eliminate threats to human beings and the environment resulting from the production, storage, movement, processing and disposal of hazardous waste; ii) prevent the contamination of sites due to poor management of hazardous waste; iii) mobilize resources for a sustainable and sound management of hazardous waste to protect the

environment and clear up contaminated sites ; and finally iv) reduce the impact of hazardous waste on the global environment, including marine and terrestrial biodiversity conservation, protection of the environment against micro pollutants such as persistent organic pollutants (POPs), heavy metals and plastic waste.

- Sub regional strategy for the management of plastic waste within the ECOWAS region (at the finalization stage).

6 THE EVOLVING CONTEXT, ISSUES AND CHALLENGES OF ENVIRONMENTAL MANAGEMENT WITHIN ECOWAS

6.1 The evolving context

The dynamics inherent in the nature of environmental problems and the complexity involved in their management bring about new challenges from one period to the other. That is how between 2009 and 2014 and, since then, the context of environmental management has changed significantly at various levels:

Global level: The Rio +20 Summit marked the end of the MDG commitments and the adoption of 17 new Sustainable Development Goals (SDGs) to be achieved within the period 2015 – 2030. Countries have committed themselves to place SDGs at the heart of their development strategy.

MDGs have driven most developing countries to deploy tremendous efforts, especially in terms of poverty reduction, access to potable water, enrolment of children in schools, reduction in infant mortality, a decline in the prevalence of malaria, AIDS and tuberculosis. After their conclusion at the end of 2015, world leaders called for the establishment of an ambitious and long-term program to improve people’s lives and protect the planet for future generations. Thus, on the basis of the document “Transforming our World: The 2030 Agenda for Sustainable Development” the United Nations General Assembly adopted, from 25 -27 September 2015, 17 SDGs and 169 targets backed by indicators that cover many issues. *Objective 1 “End poverty in all its forms everywhere”, objective 2 “End hunger, achieve food security and improved nutrition and promote sustainable agriculture, objective 14 «” preserve and exploit in a sustainable manner oceans, seas and marine resources” and objective 15” preserve and exploit in a sustainable manner terrestrial ecosystems”* are particularly relevant in the implementation of this action plan and will undoubtedly contribute to it.

Similarly, new multilateral agreements on the environment and development have come into force since the validation of the EAP. These include: the Minamata Convention on Mercury, Paris Climate Agreement, Nagoya Protocol on sharing results from access to genetic resources and the Nagoya Kuala Lumpur Supplementary Protocol on Liability and Redress to the Cartagena Protocol on the Prevention of Biotechnological Risks. There also decisions of the Conferences of the Parties on the implementation of agreements to which ECOWAS Member States are signatories, strategies and action plans adopted at the global level.

With regard to funding mechanisms, the Green Climate Fund established under the climate convention became operational after the validation of the EAP.

The Minamata Convention on Mercury is an initiative² aimed at eliminating the supply, demand and release of any form of mercury from anthropogenic sources to reduce to the minimum its presence in the environment. As the latest convention on chemical and waste products, it aims at promoting the adoption and implementation of binding legal instruments that contain the necessary obligations to eliminate, as much as possible, and reduce to the minimum the mercury supply, demand and world trade in mercury, anthropogenic disposal of mercury into the environment and humans and nature's exposure to mercury. Its implementation in ECOWAS countries requires an update of the regulatory and legislative frameworks on managing hazardous chemical products as well as strict measures to control their movement, disposal and better still, the reduction of the negative effects on human health and the environment.

Paris Agreement: the COP 21 held in Paris in December 2015 paved the way for the conclusion of a climate agreement enjoining 195 countries to reduce their greenhouse gas emissions. The ultimate ambition of this agreement which came into force in December 2016 is to ensure that signatory countries contribute to the stabilization of global warming due to human activities well below 2°C by 2100 (in relation to the preindustrial area temperature) by intensifying efforts to achieve the 1.5°C target. These contributions of the Parties known as “Nationally Determined Contributions” are expected to be reviewed every five (5) years after 2018 to sustain efforts at reducing emissions. Developing countries are now participating in efforts to reduce GHG emissions. Besides, the Paris Agreement contains a decision on the funding floor of 100 billion dollars per year earmarked for developing countries by developed countries to support emission reduction and adaptation efforts. The Green Climate Fund is the main mechanism responsible for managing these funds.

At the continental level: (i) the Agenda 2063 on the Africa We Want and its Action Plan for 2015-2025, (ii) relevant decisions of the African Union Summit of Heads of States on the environment and African strategies adopted, (iii) decisions from the African Ministerial Conference on the

² An initiative of Zero Mercury Working Group which is an international coalition of public interest non-governmental organizations that advocate for the environment and health.

Environment (AMCE) and strategies adopted, the implementation of ratified African conventions.

Agenda 2063 is a plan developed through a people centered approach which aims to ensure the structural transformation of Africa. It was approved by the African Union Golden Jubilee Summit in May 2013.

It is worth noting that the No1 aspiration expressed by Africans in this framework is a prosperous Africa based on an inclusive growth and sustainable development: *“the continent, while striving to achieve prosperity, will maintain sound ecosystems and preserve the world and African environment”*.

“By 2063, Africa’s biodiversity, including forests, rivers and lakes and genetic resources, lands as well as fish stocks, marine and coastal ecosystems that are facing degradation will be completely preserved and utilized in a sustainable manner. Forests and the vegetative cover will be restored to their state in 1963. Land degradation and desertification would have been arrested and completely reversed. African countries would have reduced or preserved at least 90% of biodiversity loss and all natural habitats.”

Sub regional level: (i) the development and adoption of sector and sub sector policies and strategies (strategy for the reduction of vulnerability and adaptation to climate change adopted in 2010, Convergence Plan for the Management of Forest, Wildlife and Ecosystems adopted in 2013; Sub Regional Program to Control Desertification adopted in 2013, strategies and action plans on handling hazardous chemicals and waste; (ii) the institutional reform underway at the Commission and other ECOWAS institutions; iii) adoption of the strategic objectives of ECOWAS and the Commission for the period 2016-2020; (iv) improvement of cooperation with other institutions and partners (USAID, World Bank, European Union, African Development Bank, UEMOA, IUCN, Global Environmental Facility, GCF) in matters of the environment and natural resources; (v) implementation of sub-regional projects.

National level: the context has also changed thanks to the adoption or update of policies and strategies in various areas concerning the environment and natural resources: sustainable development, prevention of biotechnological risks, preservation of genetic resources, plastic waste, hazardous waste, climate change, Nationally Determined Contributions, chemical products, electronic waste as well as a significant increase in the number of projects funded and implemented.

In fact, international processes that Member States have joined have compelled them to develop specific sector policy documents to meet the requirement of conventions. With the countries signing on to the United Nations Convention on Biological Diversity, they had to prepare a national monograph followed by a strategy document on the conservation and

sustainable utilization of biological diversity and finally an Action Plan for biodiversity conservation.

A similar process was followed by countries under the climate convention which enabled countries to develop national document that identify GHG emissions/absorption and define adaptation priorities in their National Plans for adaptation to climate change (NAPA/NPA)

Member States have joined international processes that have prompted them to develop policy documents and strategies to deal with problems confronting them and meet the requirements of conventions.

New developments at the levels mentioned above have created new challenges for Member States in addition to the already recurring problems of environmental management compounded by globalization.

The balance sheet analysis of achievements under the 2008 – 2014 Action Plan whose implementation period has ended and changes in environmental management at national, sub-regional continental and global levels justify the need to update the implementation action plan of the ECOWAS Environmental Policy.

6.2 Issues and challenges to be addressed in managing natural resources and the environment within the ECOWAS space

The economy of most West African countries depends largely on natural resources which form the basis of people's livelihood and represent the main source of national wealth creation. This reliance on natural resources increases their vulnerability to environmental changes. Nevertheless, the environment has been undergoing constant degradation for several decades, despite the numerous initiatives taken by communities, countries and supranational institutions. This explains why the protection and rational management of the environment in West Africa involve many sustainable development challenges. These new related issues and challenges are as follows:

Food security and poverty reduction in rural areas, in particular. In fact, persistent poverty is a factor that worsens the pressure on forest resources and biodiversity. Soil degradation and the decline of agricultural productivity increase the impoverishment of rural populations. However, the sustainable management of natural forests will help generate additional resources for local populations through value addition to wood products and non-timber forest products (NTFPs).

The rationalization of environmental governance by strengthening the ECOWAS Directorate of Environment and national environmental services in the sub region and a greater synergy of action will enable them play their expected roles at the national and international levels.

Terrestrial, marine and coastal ecosystems are facing degradation due to many human factors in addition to the effects of climatic deterioration and climate change.

The unpredictable effects of climate may be very harmful due to the structure of West African economies which depend heavily on the primary sector (agriculture, fishing, forest resources) that provides livelihoods for over 70% of its population. The primary sector is particularly vulnerable to the effects of climate change.

Chemical products and waste constitute a major challenge. Inadequate national regulations and their non-enforcement coupled with inefficiencies in border controls expose the environment and people's health to the dangerous effects of these products. In poorly urbanized cities, household waste management is mostly a common challenge. No country in the sub region has been able to put in place technical procedures and an effective regulatory and fiscal system suitable for our context.

The relationship between citizens and the environment and the management of natural resources is an important issue, as human action is ultimately crucial. An environment-friendly behavior among citizens is a decisive factor, however mass awareness creation and sensitization combined with basic education for the benefit of young people are the only levers capable of leading to a lasting behavioral change.

Meanwhile, the lack of experts in key sectors such as toxicology and garbology and sustainable land management must be gradually addressed by developing courses at various levels of specialization and supporting research.

7 STRATEGIC ORIENTATIONS FOR THE PERIOD 2020 – 2026 AND INTERVENTION LOGIC

The strategic orientation of the EAP for the period 2020- 2026 is essentially based on the analysis of the environmental context and emerging issues which helped to highlight the urgent challenges that ECOWAS must address in the coming years. However, the scope is still guided by the ECOWAS Environmental Policy (ECOWEP) and the principles of action are based on ECOWAS guiding principles.

7.1 ECOWAS guiding principles

ECOWAS has defined principles that guide cooperation within the Union and which must be reflected in its programs, projects and decisions. The general principles include the following:

- The principle of subsidiarity: national competence shall be the rule “community competence” can only prevail if it brings a substantial value added.
- The principle of complementarity allows the consideration of comparative advantages of the various countries, ecological zones and production basins.
- The principle of “regionality” according to which the Community shall
- only deal with issues which involve at least two Member states;
- The principle of solidarity according to which the Community shall guarantee minimum cohesion among its members and pool human, financial and institutional resources in order to reduce existing disparities;
- The principle of partnership and dialogue aims at ensuring constant involvement of stakeholders of the sector concerned (the environment in this case) in the implementation, monitoring-evaluation and possible rewriting of the Community’s environmental policy.

Other principles are stated in the community policy framework which are specific to environmental issues. These include:

- Principle of Continuity: The principle of continuity requires that actions that have already been started and some areas of the previous program should remain valid and taken into account;
- Principle of constant reference to the Millennium Development Goals (MDGs);
- Principle of minimization of duplications to ensure synergy and coherence amongst the various actors;

- Principle of responsibility or the polluter pays principle;
- Principle of iteration and periodic review: this principle requires periodic adjustment of the environmental policy based on contextual changes;
- Principle of inter-disciplinarity: the environment consists of a series of sectors, processes and interfaces. The environmental policy must cover all these sectors which touch on the economic, social and ecological dimensions.

7.2 Strategic orientations

All analysis of the economic situation in West Africa agree that poverty is the main obstacle to the sub region's development and constitute a major challenge for the rational and sustainable management of the environment and natural resources. In fact, the ECOWAS Vision 2020 takes into account the issue and focuses on the DIGNITY and PROSPERITY dimensions within the perspective of a sustainable management of natural resources. This requires that the economic dimension is included in the definition of policies and programs.

The ECOWAS Common Environmental Policy aims to *“to reverse environmental degradation and depletion of natural resources, improve the quality of the living environment, conserve biological diversity, with a view to ensuring a healthy and productive environment; thereby improving the well-being of the population of the sub region”*.

Based on this overall objective, the environmental policy document identified four strategic focus areas. The orientations in the Action Plan are those of the ECOWAS Environmental Policy. The strategic objectives are reformulated according results based management principle as follows:

- Environmental governance and capacity development are strengthened;
- The sustainable management of resources to improve the sub-regional economy in an environment friendly manner is promoted;
- The fight against pollution, nuisance and waste to control the movements of hazardous products is strengthened;
- Information, Education and Communication for a healthy environment are promoted.

7.3 Intervention logic

After developing the environmental policy, the ECOWAS Directorate of Environment designed implementation tools through sector plans which facilitated a more accurate diagnosis of environmental issues and the definition of lines of action to deal with them.

All the analysis agreed on two main observations: i) environmental and natural resource management challenges facing the West African sub region are many and all have a more or less significant impact on the economic development and quality of life of populations; ii) West Africa is endowed with enormous environmental potentials that are undermined by poverty among the population coupled with lack of coordination at the regional level for their rational and sustainable management. This situation is worsened by climate change which will undoubtedly have drastic consequences on an economy led by the primary sector and very sensitive to its effects.

In fact, the ECOWAS Vision 2020 takes into account the issue and focuses on the DIGNITY and PROSPERITY dimensions within the perspective of a sustainable management of natural resources. Within the framework of these strategic logics, the 2020-2026 Environmental Action Plan which is based on strategic objectives defined in the ECOWAS Environmental Policy has as its main operational focus areas the following:

a) Strengthening environmental governance and developing operational capacity;

West African countries have subscribed to many Multilateral Environmental Agreements (MEAs). These include agreements on climate, biodiversity, and the control of the movement of hazardous chemicals and waste, etc.

ECOWAS has a major coordinating role in ensuring the involvement of countries in the monitoring and implementation of multilateral environmental agreements. This function can effectively be assumed through the establishment of a high level platform comprising ministries, West African community organizations (UEMOA, ADB, BOAD, etc.) some important NGOs/IGOs (IUCN, WWF, etc.) as well as personalities/universities selected based on their special competence in areas and subjects at stake.

This will also involve strengthening the leadership role of ECOWAS in order to better organize the region's participation in international negotiations on climate. This coordination need is felt prior to international meetings to develop common positions during negotiations on the climate convention (COP and their technical bodies). Besides, countries will be supported to have a better understanding of negotiation conditions and build common positions that will be

defended within the various negotiation groups such as the African Group, LDCs Group or G77 plus China. Countries do not benefit from the same level of preparation and capability in terms of negotiations, hence the need for ECOWAs to organize capacity-building workshops for national delegations. The African Development Bank plays a key role in supporting African negotiators, especially in the area of legal, financial and economic capacity building. In this context, a close partnership with this institution is desirable.

The same also applies to multilateral agreements (biodiversity, movement and trading of chemicals) where West African representatives need to build their technical and coordination capacity in developing their positions to be able to defend the sub region's particular interests.

It is also necessary to capitalize on opportunities offered by the various conventions in terms project preparation fund (readiness program, Technical Needs Evaluation (TNE), funding of project eligible for GCF and preparation for REDD+ projects) that may assume greater importance as part of the implementation of the Paris Agreement.

In addition, ECOWAS will develop environmental monitoring mechanisms for the prevention of risks as well as natural, industrial and chemical disasters and build the capacity of national meteorological and hydrological services by improving access to data as well as the technical skills of officials of these services. Similarly, in collaboration with the ECOWAS Humanitarian Affairs Directorate, there will be plans to update community strategic intervention frameworks to take account of environmental aspects of contingency plans. These plans will indeed facilitate the implementation of community solidarity mechanisms to address environmental disasters (spillage of crude oil or other chemical substances, flooding, droughts) of magnitudes that may outstrip the intervention capacity of countries taken individually.

Given the expansion of industrial oil exploration and extraction activities off-shore, it is imperative that ECOWAS set up a common regulation which makes environmental impact studies an obligation and define minimum specifications. These activities must also be guided by an environmental and social management plan (ESMP) with minimum specifications that are subject to regional directives.

The same applies to the production and inter-states movement of hazardous chemicals and waste which require an update of national regulations to make them consistent with international norms and standards.

Environmental challenges have reached such a level that there is the need for an environmental permit to enable national environmental agencies to monitor on a regular basis technical specifications and have legal means of intervention to forestall irreparable damages.

The environment and natural resources are cross-cutting sectors that are closely interrelated with other productive economic sectors but are affected in the long term by environmental degradation. This explains why ECOWAS must build the operational capacity of the Directorate of Environment for an effective implementation of strategies and action plans developed to preserve the productive base of the primary sector and improve the living environment and health of the population.

Capacity building must start with a staffing plan that will enable the reduced unit of the Directorate of Environment to engage competent human resources for the various focus areas of the Environmental Action Plan to ensure an effective monitoring and implementation of field projects to be derived from this Action Plan.

As regards financial resources, ECOWAS authorities must allocate financial resources equal to the ambition and issues at stake. Finally, the ECOWAS Directorate of Environment must adopt a policy on a more aggressive fundraising from institutional partners involved in the implementation of the Action Plan as well as West African and international technical and financial partners.

b) Promoting sustainable management of resources to improve the sub-regional economy in an environment friendly manner;

The aim is to ensure regular status report on the environment and the sustainable management of natural resources to enable national and regional bodies have the relevant tools and parameters to update and fine-tune their policies and intervention strategies.

ECOWAS will also aim at maintaining the productive base of natural forest and marine environment in a context of strong vulnerability caused by climate change, while adding value to their resources for the benefit of local populations. Specifically, this will involve promoting large scale forest development that will improve the physical resilience of forest ecosystems and forestall the adverse effects of climate change in terms of degradation of forest lands. This will also help develop the economic resilience of local populations by enabling them to generate additional financial resources through value addition to ecosystem services. These developments will also have a significant impact on the preservation and improvement of

ecosystem biodiversity. The Forest Convergence Plan (FCP) offers from this perspective an adequate framework of actions.

Sustainable land management also remains an imperative for the development of agriculture and livestock production. The Action Plan will therefore lay special emphasis on land erosion control, the preservation of river basins and fertile lowlands, promotion of agroforestry and desertification control while improving agricultural land productivity through the restoration of fertility by means of a package of coherent actions aimed at a better integration of agriculture, livestock production and forestry which will, in any case, improve the living conditions of populations.

As regards the marine and coastal environment, ECOWAS action will seek to prevent the degradation of coastal areas, especially the most vulnerable sites such as mangroves, estuaries as well as islands, improve fisheries productivity and conserve biodiversity among others, through the promotion of Protected Marine Areas. Other mechanisms suitable for the preservation of coastal and marine resource will be set up and popularized through a regional demonstration project on climate change.

In addition, the Directorate of Environment will contribute to the implementation of the Regional Water Policy developed in collaboration with CILSS and UEMOA.

This will involve reviving research and educational institutions dealing with forestry to take account of emerging sectors that lack experts and conduct studies that will help highlight the social and economic role of forests and their contribution to the generation of greater national and international investments in the sector.

c) Fighting against pollution, nuisance and waste to control the movements of hazardous products within the economy is strengthened;

The African continent is particularly vulnerable to the toxic effects of hazardous chemicals and waste which degrade the environment and are the cause of many health problems for the populations at risk. This is mainly due to lack of information among the populations, including experts in public administrations. This is compounded by a technological gap in the identification of active components, their effect on human health and the environment and the means of controlling their effects. Similarly, national regulations are often ill-adapted. They are complemented or replaced with international conventions signed by majority of ECOWAS countries but are hardly applied effectively.

Concerning nuisance, it is worth noting the effect of stress caused by an environment with noise levels beyond international standards which induces stress and morbidity among a significant number of city dwellers. In recent years, electromagnetic radiation has been added due to the development of mobile telephony. Public health authorities need to pay greater attention the effects of telephone devices and antennas spread across urban areas on human health in order to reduce the level of exposure of the population, especially children and young people.

Under this Action Plan, ECOWAS will support Member States to upgrade and harmonize their legislations to make it easy to control the movement of hazardous chemicals and suppress crimes. In the same vein, the technology gap must gradually be filled by promoting academic research, the establishment of research centers and technological innovations to develop substitute that are less injurious to health. Finally, ECOWAS' action will focus on the prevention of accidents, that have become so rampant, by building capacity along the chain handling hazardous chemicals and creating storage centers for illicit or obsolete products and decontaminating highly contaminated sites to preserve the environment and people's health. All these interventions require financial resources that can be provided through a specific fund. This fund will be subject to a study to determine modalities for its establishment, replenishment and management.

Moreover, improving the living environment of urban and rural populations as well as the preservation of public health against pollution and nuisance are major challenges for ECOWAS authorities. In this respect, the proliferation of household waste is a source of major concern due to their harmful effect on health and the environment. ECOWAS' action will aim at promoting research-action programs that will help bridge the relevant information gap and set up suitable operational intervention models based on the prevailing situation. These projects will also facilitate the development of relevant legal and fiscal content to support sustainable waste management in urban areas and generate teaching modules for the benefit of environmental training institutes in the sub region.

d) *Promoting information, education and communication for a better environment*

The objective is to ensure a better involvement of West African populations in environmental development initiatives through sustained and appropriate mass communication. ECOWAS will implement a policy to create awareness among the community's citizens on the effect of their behavior and attitude on the environment and their own health. Citizens must understand that no waste management policy can be viable if some behavioral principles are not observed, no

forest development can be sustained if regeneration or protection activities against bushfires are not carried out in a timely manner, etc. The communication strategy will be mass communication through public and private media, using repetitive bills to ensure that the message is well ingrained in the individual and collective consciousness of the population.

At the same time, basic education will be provided in a longer term for young people through regional environmental education program that will cover primary and second cycle institutions for a sustained qualitative change of mentalities among the young generations.

The table below presents the matrix of action for the Environmental Action Plan. For each specific objective, it defines the environmental policy, results to be achieved in the next five years and key stakeholders that will contribute to the achievement of the results.

Table 2 : Intervention logic

Specific objective	Expected results	Stakeholders/ Partners
SO1 : Environmental Governance and capacity development are strengthened	1.1. Monitoring and implementation of streamlined and more effective Multilateral Environmental Agreements (MEAs).	Member States, ILSS, UEMOA, ACMAD, NGOs, BOAD, ADB, Universities, Abidjan Convention, (WABICC)
	1.2. Data availability and use improved for decision-making in NRM and prevention of natural, environmental and technological disaster risks	Member States, UEMOA, CILSS, Abidjan Convention, UEMOA, RAMPOA, Industrial companies, local authorities
	1.3. Capacity for coordination, resource mobilization, monitoring and implementation of the EAP and other sub-regional and continental programs strengthened	Member States, UEMOA, WHO, UNIDO, WB, Universities & Institutes, NGOs, International Conventions, D/Env?
	1.4. Harmonized legislative and regulatory frameworks and implementation tools for better environmental and natural resource preservation	D/Env, ECOWAS, focal points, Member States and main dev. Partners
SO2: The sustainable management of resources to improve the sub-regional economy in an environment friendly manner is promoted	2.1. Land, forest resources and protected areas and wildlife management enhanced and addressing climate change	Member States, private international conventions,
	2.2. Management of marine and coastal resources improved	Member States, universities, private consulting firms, development. Partner programmes/projects
	2.3. State of knowledge on the environment is improved	UEMOA, CILSS; Sub regional and national institutions; FAO; CIFOR; ITTO; African Forest Forum
	2.4. Resilience and adaptation capacities to climate change and mitigation effects strengthened	ECOWAS; UEMOA; CILSS; Sub-regional institutions; FAO; CIFOR; ITTO; African Forest Forum, GGCP
	3.1. Risks associated with chemicals and waste are reduced	Member States, APHCR, Local authorities, Universities, EU, IDB, development. Partner programmes and projects

Specific objective	Expected results	Stakeholders/ Partners
SO3: The fight against pollution, nuisance, and waste to control the movements of hazardous products is strengthened	3.2. The Illicit trafficking of toxic substances and hazardous wastes is better controlled	Member States, APHCR, Local authorities, IDB, DFID, AFD, EU
	3.4. The technical management of toxic substances, wastes and nuisance is promoted	Member States, UNEP, FAO, WHO, UNIDO, UNITAR, OECD, UNDP, Convention Secretariats
	Resources for the sustainable financing of the management of chemicals and waste are mobilized	Member States, Universities, UNIDO, FAO Research Centers, UNIDO, Laboratories, Private sector, Convention Secretariats, NGOs,
OS 4: Information, Education and Communication for a better environment are promoted.	4.1. West African populations are better informed about environmental issues in order to adopt more environmentally responsible behavior and responsible management of natural resources	Member States, NGOs, Public and Private Media, WHO, UNESCO, Public and Private Media Projects, CILSS/INSAH
	4.2. Best practices in environmental and natural resource management identified and disseminated, enriching policies and strategies	Member States, UNEP, FAO, WHO, UNIDO, Public and Private Media, Convention Secretariats
	4.3. The visibility of institutions in charge of environmental and natural resource management issues is strengthened	Member States, UEMOA, CILSS WABICC

8 2020-2026 ACTION PLAN

This Action Plan is an operational translation of the environmental policy defined by ECOWAS in 2008 and which has the following strategic objectives i) strengthening of environmental governance and development of capacities, ii) promotion of sustainable resource management to improve the sub-regional economy in an environment friendly manner, iii) strengthening the fight against all forms of pollution, nuisance, waste and the control of the movements of hazardous chemical substances and finally, iv) promotion of information, education and communication strategies for better living environment.

However, it also takes account of new challenges, particularly the progress made with respect to the Convention on Climate Change including i) the Paris Agreement which aims to contain global warming below 2°C by 2100. This agreement seeks also to strengthen the role of the Green Climate Fund (GCF) for the management of USD 100 billion earmarked to finance climate projects in poor countries ; ii) the 17 SDGs adopted by the UN General Assembly to at end poverty and hunger, improve health and education, build more sustainable cities, combat climate change and protect oceans and forests, iii) the Minamata Convention which seek to minimize or eliminate global mercury supply and trade and its disposal into the environment and exposure among populations, the Nagoya Protocol on access to genetic resources and the fair and equitable sharing of benefits arising out of their use and aimed at combating biopiracy that entered into force in 2014, etc.

This Environmental Action Plan takes into account the strategic options of the sectoral documents mentioned above. It covers the period 2020- 2026 and will be updated according to the results of its implementation and new development in the national, regional and international contexts at the end of its implementation period.

9 Impact and risk analysis of the Action Plan

The action plan is a complete package which requires coherent activities to achieve an overall result that would lead to a substantial improvement in the environmental and natural resource management in West Africa.

The previous diagnosis which revealed a glaring lack of human and financial resources of the Directorate of Environment leads to the recognition of this situation as a major risk for the implementation of the Action Plan. Averting this risk is the responsibility of the ECOWAS Commission which has the duty to provide the Directorate of Environment with the necessary resources to accomplish its mission. At the same time, the Directorate of Environment must also, through an efficient partnership policy, find ways and means to implement its program through the numerous multilateral mechanisms available.

The second major risk relates to the lack of application of community directives by Member States. This risk is therefore the responsibility of states, which by their accession to the community, have the duty to comply with the policy and directives of the Commission to facilitate the coordination role of ECOWAS.

When these risks are controlled, the implementation of the EAP would ensure that:

- The coordination of environmental governance in West Africa is improved and the region's presence in international negotiation bodies is more efficient;
- Policies as well as legislative and regulatory frameworks for the management of the environment and natural resources are better harmonized and adapted;
- Environmental resources are better known and their management methods improved;
- The living environment of populations is improved and their exposure to the harmful effects of waste and hazardous chemicals is reduced;
- Mechanisms for early warning and effective management of environmental risks as well as threats associated with natural and industrial disasters are established;
- Experiences and knowledge are better utilized and shared
- Human resource capacities are developed at various levels;
- West African citizens' behavior towards the environment is improved, leading to a radical behavior changes in young people and adolescents in the long term.

Table 3 below presents a summary of the action plan with the expected results for each objective as well as actions and activities planned to achieve these results. It also presents the expected effects as well as the possible risks that will require attention.

Table 3 Action Plan: Summary of Results, Impacts Activities and Actions/Effects and Risks

SO1: Environmental Governance and Capacity Development is Strengthened				
Expected results	Actions	Activities	Effects	Risks
1.1. The legislative and regulatory frameworks as well as the implementation tools are harmonized for better preservation of natural resources	1.1.1: Put in place mechanisms for information collection and production on MEA implementation	1.1.1.1. Identify the main MEAs that need to be monitored at the regional level and the key related parameters	Member States adopt legislative and regulatory frameworks in line with the regional frameworks.	The selection excludes MEAs that may become more important in future
		1.1.1.2. Set up thematic working groups for the collection and analysis of information on the main MEAs		
		1.1.1.3. Set up a database for monitoring MEA parameters/information		
	1.1.2: Include women in all EAP activities.	1.1.2.1: Identify the most representative organisations at the sub-regional level to involve them in the whole process.	Better use of human potential	Low level of women's interest in environmental governance, Socio-cultural burdens on women.
	1.1.3: Support effective key stakeholder participation in international MEA negotiations in the sub-region	1.1.3.1. At least one capacity-building workshop for national (State and NGOs) negotiating teams on major MEAs is organized annually	West African negotiators are better equipped and more effective during negotiations The positions of West African States are better coordinated and their interests are better defended	Frequent changes of State-appointed negotiators Divergent national political or diplomatic interests
		1.1.3.2. At least one negotiation preparation workshop which allows the harmonization of positions of Member States on one hand and the building of a negotiation strategy on the other to be organized before each COP for selected MEAs		

	1.1.4 Support Member States in the development and implementation of action plans on MEAs	1.1.4.1. Provide technical and methodological support to Member States to benefit from financial opportunities under international conventions by setting up required procedures and developing projects to be submitted (readiness program, EBT program, etc.), GCF and other funds	More financial resources mobilized under MEAs for the benefit of the environment in the sub-region	Budget restrictions to ensure support to Member States
		1.1.4.2. Provide technical support to Member States to develop and submit competitive projects to meet their commitments under the Conventions and to take advantage of the financing opportunities offered by the Conventions. The aforementioned projects will be submitted to the GEF, GCF, or FA/LDC, etc. depending on the themes.		
		1.1.4.3. Provide support for the implementation of reforestation projects under the GMV of the UNCCD		
1.2. Improved availability of data and information to enhance decision-making in the management of risks, pollution, natural and environmental disasters	1.2.1. Set up a platform to share existing data in order to improve their accessibility	1.2.1.1: Identify existing databases	Better controlled hazards and reduced impact of disasters	Low data generation capacity Low transfer of appropriate technologies
		1.2.1.2: Put in place procedures and mechanisms for data sharing		
	1.2.2. Strengthen the regional disaster management plan	1.2.2.1. Identify specific environmental areas of DRR /ECOWAS DRR		
		1.2.2.2. Implement a study to strengthen the DDR / Policy Document in identified areas		
	1.2.3.1. Implement a study to review the gaps in meteorological and hydrological			

	1.2.3. Strengthen National Meteorological and Hydrological Services (NMHSs)	services and develop a capacity building plan based on this.		
		1.2.3.2. Promote synergies and information exchange between meteorological and hydrological services in the sub-region through common platforms.		
	1.2.4. Improve the use of climate services and Earth Observation data for decision-making	1.2.4.1. Improve the reception, processing, archiving, and data dissemination capabilities of national meteorological and hydrological services		
		1.2.4.2. Build data interpretation and modelling capacity of managers of national meteorological and hydrological services.		
		1.2.4.3. Establish a framework for the participation of ECOWAS countries in African climate service development projects		
		1.2.4.4. Set up mechanisms for wide dissemination/better use of climate services generated by the projects.		
		1.2.4.5. Put in place mechanisms for the transfer of skills from projects to regional institutions		
	1.2.5. Promote and encourage the establishment of private	1.2.5.1: Disseminate information on startup creation opportunities		

	companies in emerging environmental sectors	1.2.5.2: Facilitate access to data for the establishment of private companies			
		1.2.5.3: Sensitise financial institutions to take more risk in climate-related business areas			
		1.2.5.4: Set up procedures for the transfer of skills from projects to regional institutions.			
1.2. The capacity to coordinate, mobilize resources, and monitor the implementation of the EAP and other sub-regional programs is strengthened.	1.3.1. Develop management tools, norms, and standards for the implementation of ECOWEP.	1.3.1.1. Create ECOWEP management bodies at the national and regional levels to ensure the holding of regular meetings	Effective implementation and periodic evaluation of the ECOWAS environmental policy	Lack of synergy/collaboration between stakeholders in the implementation of the EAP	
		1.3.1.2. Ensure regular collection of ECOWEP monitoring and evaluation data developed in the MEP			
	1.3.2 Strengthen the networking capabilities of Environmental Administrations in West Africa	1.3.2.1. Institute at least one annual meeting of environmental administrations for the evaluation of EAP and exchange of experiences	More coherent national environmental policies in West Africa		
		1.3.2.2. Ensure regular exchange of information through communication tools put in place by the ECOWAS Directorate of Environment			
		1.3.3: Manage frameworks for consultation, collaboration, and intersectoral dialogue with sub-regional institutions and non-state stakeholders.			1.3.3.1. Establish an intersectoral consultation platform including regional institutions, IGOs, universities, etc.
		1.3.3.2. Ensure at least one annual platform meeting on a given environmental theme			
1.4. A financial resource mobilisation strategy is	1.4.1. Put in place resource mobilisation strategies for the implementation of the EAP	1.4.1.1.: Strengthen States' capacity to access financial resources within the MEA frameworks	More financial resources mobilised	A shift in the priorities of the financial partners	

developed and implemented		1.4.1.2. Organise a round table meeting of donors as soon as the EAP is adopted to identify areas of cooperation with the TFPs		
1.5. Monitoring and implementation of MEAs are improved and made more effective	1.5.1. Put in place mechanisms for the collection and generation of data on the implementation of MEAs	1.4.1.3: Develop and sign a Memorandum of Understanding with TFPs, regional financial institutions, convention secretariats for the funding of the EAP	Harmonisation of laws facilitates the implementation of regional integration policies.	Lack of will on the part of some States
		1.4.1.4: Commission a study to identify a sustainable sub-regional environmental funding mechanism.		
		1.5.1.1: Develop a general normative framework for the updating of national regulations in the areas of the Forest Convergence Plan (legal study)		
		1.5.1.2: Support the States in updating national regulations in the identified areas.		
		1.5.1.3: Support the development and implementation of regional guidelines and regulatory texts on the conservation of protected areas and the fight against cross-border wildlife crime.		
1.5.1.4: Support the development and adoption of a Community directive for the promotion of legal intra-West African cross-border trade in timber and timber products and non-timber forest products.				
1.5.1.5: Assess the effectiveness, relevance, and effects of the harmonisation of regulations already carried out				

		1.5.1.6. Develop a general normative framework for other relevant environmental sectors (coastal management, pastoralism, chemicals, etc.).		
	1.5.2: Build capacity for the effective implementation of legislative and regulatory frameworks	1.5.2.1: Develop and implement a capacity building plan for stakeholders for the implementation of legislative and regulatory frameworks	Effective implementation of laws and regulations adopted at the national and regional level	Lack of financial and technical resources
		1.5.2.2: Build capacities for the effective enforcement of natural resource laws and the fight against environmental crimes		
		1.5.2.3: Build biosafety capacities		

SO2: The sustainable management of resources to improve the sub-regional economy in an environment-friendly manner is promoted

Expected results	Actions	Activities	Effects	Risks
2.1. The management of land, forest resources, and protected areas is improved	2.1.1 Implement the Forest Convergence Plan	2.1.1.1. Develop and implement Annual Work Plans (AWPs) derived from Regional Forest Investment Programmes (RFIPs)	Improved preservation of forest, wildlife, and soil resources and increased resilience of vulnerable rural populations Plant resources help to preserve the planet	Unexpected effects of climate change
	A2.1.2: Implement the regional program to combat desertification taking into account	2.1.1.2. Develop Annual Work Plans (AWPs) derived from PRLCD		
	2.1.3: Support the management of protected areas (land and marine) and watersheds (Fouta Djallon)	2.1.3.1 Develop and implement a Regional Integrated Management Program of Agroforestry and Sustainable Management of Transboundary Forest Ecosystems in West Africa		
		2.1.3.2. Develop and implement a regional program to support protected areas to safeguard endangered species of fauna and flora		
2.2. The management of marine, and coastal resources is improved	2.2.1: Contribute to the implementation of PREAU	2.2.2.1. Develop Annual Work Plans (AWPs) derived from PREAU	Water resources are well managed	Financial constraints Inadequate capacity
	2.2.2 : Contribuer à la mise en œuvre des protocoles relatifs aux ressources marines, côtières et des eaux continentales de la convention d'Abidjan	2.2.2.1. Develop Annual Work Plans (AWPs) derived from the Abidjan Convention Protocols	Improved preservation of marine and coastal resources and increased resilience of populations	
		2.2.2.2. Develop and implement a regional climate change resilience project of coastal populations targeting different ecological contexts		

		2.2.3.3. Establish a coherent network of MPAs targeting EBSAs and fragile areas (mangroves, estuaries, islands, etc.)			
2.3. The level of knowledge of the environment and the management of natural resources is improved	2.3.1. Ensure regular assessment of the state of the regional environment and NRM	2.3.1.1 Develop and publish a reference document on the state of the environment in West Africa (almanac) which reviews each sector (statistics, development, management) to be updated every 5 years	Facilitation of environmental planning by the availability of up-to-date data	Absence of data or lack of political will on the part of some states	
	2.3.2. Develop tools (guides, guidelines) for NRM and the environment	2.3.2.1. Carry out a study to identify best practices and success stories, scientific knowledge, and technological innovations on the environment and NRM in order to build a knowledge bank and disseminate them.	Improved availability of scientific knowledge and best practices and actions		
		2.3.2.2. Based on scientific knowledge and good practices, develop general guidelines and methodological guides for the management of key sectors (thematic brochures on forest management, pastoralism, chemicals management, waste management, etc.) and disseminate them widely			
	2.3.3. Promoting the value addition to ecosystems goods and services.		2.3.3.1. Conduct a study to estimate the actual contribution of ecosystem goods and services to national GDPs as an advocacy tool for public environmental funding and NRM		Enhanced environmental public funding environment
			2.3.3.2. Conduct a value chain study of NTFP-related value chains in view of their promotion/rationalization		Enhancing value added of NTFPs for the benefit of local populations
			2.3.3.3. Develop and implement a regional project to add value to ecosystems goods and services		

2.4. Capacities of member states to deal with Climate change resilience, adaptation, and mitigation are strengthened	2.4.1: Contribute to the implementation of ECOWAP/ CAADP on Axis 3	2.4.1.1. Develop Annual Work Plans (AWPs) derived from ECOWAP/ CAADP	Better consideration of the environmental component in ECOWAP	Lack of synergy between technical departments Inadequate capacity
	2.4.2. Capitalize on and scale up green jobs and circular economy initiatives at the sub-regional level	2.4.2.1. Implement a study to capitalize on green jobs and circular economy initiatives and develop a subsequent regional program	Job creation in the environment sector	
	2.4.3. Support countries in the implementation of the United Nations Framework Convention on Climate Change (UNFCCC) and the Paris Agreement and other relevant conventions and protocols	2.4.3.1. Develop and implement a regional capacity building programme on the operational and financial mechanisms of the CC, PA, CBD, UNCCD, and other relevant conventions and protocols in favour of public and private frameworks in the sub-region.	Environmental conventions are better implemented in the sub-region and are more beneficial to the States.	
		2.4.3.2. Conduct a study to calculate emission factors according to ecological contexts for the main sources of CO2 emissions/absorption for the development of NDCs and carbon projects		
	2.4.3.3. Set up a database of carbon experts in the sub-region to support countries in the establishment of procedures and development of projects eligible for financial mechanisms under the CC Convention and the PA			

SO3: The fight against pollution, nuisance and waste to control the movements of hazardous products is strengthened

Expected results	Actions	Activities	Effects	Risks
3.1. Risks associated with hazardous chemicals and waste are reduced	3.1.1. Strengthen the legal framework for the prevention and reduction of risks related to chemicals, waste and nuisances	3.1.1.1. Promote the accession of Member States to international conventions	Harmonized sub-regional legal framework and facilitate the management of chemicals, waste and nuisances	low level of stakeholders' involvement in coordination of prevention, response, and surveillance
		3.1.1.2. Develop standard, norms and guidelines for the collection, handling, recycling, and treatment of chemicals, waste and nuisances		
		3.1.1.3. Promote and support States in setting up infrastructure for the ecological and sustainable management of waste and chemical products.		
		3.1.1.4. Update the legal framework taking account of international conventions and environmental standards and ensure the effective application of laws and regulations	Differences between national laws and international conventions identified and gaps filled	Lack of willingness on the part of some States to amend their laws
		3.1.1.5. Develop regional standards for the main sources of nuisances (noise, magnetic radiation...) and ensure their integration into national legislation and their effective application		
3.1.2. Promote research and development on the management of chemicals, waste and nuisances	3.1.2.1. Promote research in universities and research centers on hazardous chemicals and pesticides for the development of alternative substances	Solutions adapted to sub-regional context developed and implemented	Inadequate laboratory equipment Poor cooperation/collaboratio	

		3.1.2.2. Develop mechanisms for close collaboration in information exchange between different research centers		n between research institutions
		3.1.2.3. Promote the development and use of clean technologies in the production of chemicals to promote the use of less hazardous or benign equivalents		
	3.1.3. Build capacity for chemicals, waste and nuisance management	3.1.3.1. Strengthen border control of customs officers and the environment	Stakeholders in charge of chemicals, waste and nuisances more efficient in their mission	Brain drain
		3.1.3.2. Improve the ability of control officers to identify and handle chemicals, waste and nuisances		
		3.1.3.3. Support the provision of equipment and training of national technical services for nuisance monitoring		
		3.1.3.4. Develop courses on chemicals in particular through a specialized Master's Degree		
	3.1.4 Promote the definitive halt to the circulation of mercury in the sub-region	3.1.4.1. Train customs and environmental law enforcement officers in the identification and tracking of mercury-containing products	Better sensitization of populations on risks related to chemicals, waste and environmental nuisances	Porosity of borders Persistent illegal artisanal mining Lack of effective control
		3.1.4.2. Promote the use of alternative products and improve their availability and affordability		
	3.1.5. Promote information and communication on	3.1.5.1. Develop appropriate information tools for decision-makers, industrialists and the general public		

	chemicals, waste and nuisance management	3.1.5.2. Broadly publicize international laws, regulations and agreements on chemicals, waste and nuisances		
		3.1.5.3. Create and/or revitalise Chemicals Clearing House Mechanism (CCHM) networks at the national or sub-regional level		
3.2. The illicit trafficking of chemicals and toxic waste is controlled	3.2.1. Promote environmental governance for the prevention and control of illegal trafficking of chemicals and hazardous waste	3.2.1.1. Improve coordination, cooperation and synergies among various stakeholders in charge of chemicals management	Illegal traffic in chemicals and hazardous waste is significantly reduced	
		3.2.1.2. Integrate the management of chemicals into public policy making		
	3.2.2. Intensify the fight and repression against illegal traffic in toxic and hazardous wastes between ECOWAS countries.	3.2.2.1. Strengthen the technical means of control, detection and prevention of customs officers and environmental services at borders		
		3.2.2.2 Improve the training of border officials and services for the detection of chemicals and production of evidence		
		3.2.2.3. Train and sensitise judges and customs officers on laws relating to the illegal traffic in chemicals and hazardous waste		
3.3. The technical management of	3.3.1. Gather and disseminate data and information to improve knowledge on	3.3.1.1. Identify and prioritise hazardous chemicals, hazardous waste, and nuisances (waste electrical and electronic equipment, biomedical waste, batteries,	Better knowledge about the effects of chemicals, hazardous waste and certain nuisances	Capacity gaps

hazardous chemicals and waste is improved	chemicals, waste and nuisances at the regional level	plastic waste, tyre waste, etc.) and assess their environmental and health impact		
		3.3.1.2. Evaluate the impact of certain critical nuisances (noise, electromagnetic radiation) on the populations and means of remediation		
	3.3.2. Strengthen capacities and technical cooperation to promote BAT/BET and the rehabilitation of contaminated sites	3.3.2.1. Promote the best available technologies and best environmental practices for the management of hazardous chemicals	Better control of technical conditions for better management of chemicals	Lack of willingness to make technologies and good practices accessible
		3.3.2.2. Create secure centers for storing expired or fraudulent chemicals		
3.3.2.3. Strengthen capacities for rapid assessment of contamination and develop the best techniques for decontamination and rehabilitation of sites				
3.4. Resources for the sustainable financing of the management of chemicals and waste are mobilized	3.4.1. Develop public-private partnership on chemicals and waste management	3.4.1.1. Provide technical and financial support for voluntary initiatives on the responsible management of chemicals, waste and nuisance	More private resources available for the chemicals, waste and nuisance sector	Lack of interest on the part of partners to fund the sector
		3.4.1.2. Promote the establishment of private chemical and waste management companies		
		3.4.1.3. Encourage the consideration of the chemicals, waste and nuisances sector in the cooperation between Member States	The sustainable financing of the sector is better secured	Absence of dedicated taxes or refusal to remit collected taxes
	3.4.2. Facilitate the establishment of special fund	3.4.2.1. Commission a feasibility study for the establishment, financing and operation of the Regional Chemicals,		

	for the management of chemicals waste and nuisance	Waste and Environmental Hazards Management Fund		
	3.4.3. Promote circular economy in the management of chemicals and waste	3.4.3.1. Conduct a study to identify development potentials of the circular economy in the chemicals and waste management sector	Sustainable green jobs are created in the chemicals sector	
		3.4.3.2. Establish incentive mechanisms for private sector project implementation		

SO4 : Information, Education and Communication for a better Environment are promoted

Expected results	Actions	Activities	Effects	Risks
4.1. West African populations are better informed about environmental issues in order to adopt more environmentally responsible behavior and responsible management of natural resources	4.1.1. Develop guidelines for integrating environmental education into school curricula in West Africa	4.1.1.1. National experiences in environmental education evaluated and utilized	Long term environmental education of young people and adolescents will lead to positive change in people's behavior in the long term	Lack of synergy with academic authorities Program sustainability guarantee
		4.1.1.2. Guidelines and themes of environmental education for every level of schooling are developed and validated in consultation with the Ministry of Education		
		4.1.1.3. Support is provided for the effective implementation of environmental education at the primary and secondary school level		
	4.1.2 Integration of emerging environmental themes such as SFM, SLM, REDD+, green economy, energy efficiency and new and renewable energies into university and post-graduate programs	4.1.2.1 Conduct an analysis of training curricula of academic institutions in the sub-region in terms of ecosystem management	The formation of a critical mass of design, management and leadership frameworks with a vision of environmentally friendly and sustainable natural resource management based on green economy and energy transition	Lack of commitment on the part of universities towards the integration process
		4.1.2.2 Support the integration of emerging themes such as SFM, SLM, REDD+, green economy, energy efficiency and new and renewable energies in the curricula of training institutions		
		4.1.2.3 Build the capacities of Member States to integrate and take into account major emerging themes in the design of policy, strategic and programmatic frameworks		
	4.1.3. Design and implement a public education program	4.1.3.1. Environmental themes for mainstream education are selected and corresponding education modules developed	West African populations adopt a more	Program sustainability guarantee

	through audiovisual media and the internet	4.1.3.2. Media professionals are trained in environmental education modules	responsible environmental behavior	
		4.1.3.3. Technical and financial support is provided to support the production of environmental education programs		
		4.1.3.4: Set up and maintain a website and share the activities and publications of the Directorate of Environment on social media.	The activities of the Department of Environment are better known and promoted	
		4.1.3.5: Publish a regular quarterly newsletter that gives updates on the environment in West Africa.	Information is more accessible and professionals have a sub-regional forum to express their views.	Guarantee for regular updates and sustainability
		4.3.3.6: Produce/co-produce environmental programmes to be aired by West African communication media		
	4.1.4. Support the establishment of vocational and specific research sectors (garbology, toxicology)	4.1.4.1. The environmental education areas to be promoted are identified and curricula developed	The lack of professionals in certain sectors of the environment is resolved	Lack of political support for the establishment of some sectors
	4.1.4.2. Education and research institutes are supported to develop the areas identified			
	4.1.4.3. A scholarship program for education and research is established to support the areas			
4.2. Best practices in the management of the environment and natural	4.2.1. List, analyze and disseminate best practices in environmental and NR management	4.2.1.1. The main themes are identified and knowledge listed, illustrated and edited according to several types of media	The capitalization of many experiences in the different countries make it possible to design relevant programs within a reasonable time	Low level of awareness of good practices Restriction of dissemination channels
		4.2.1.2. A strategy for broad dissemination of traditional knowledge is developed and implemented		

resources are listed, disseminated and rewarded	4.2.2. Promote information and data exchange on environmental issues in West Africa	4.2.2.1. A workshop is organized to identify themes and types of relevant data to be collected, their processing and dissemination methods		Lack of information and data
		4.2.2.2. A regular data collection and dissemination system is developed and implemented		
	4.2.3. Promote initiatives that contribute significantly to the promotion of the environment in West Africa	4.2.3.1. Identify and list annually significant initiatives (publications, achievements, etc.)	Environmental innovation is promoted	Guarantee for sustainability
		4.2.3.2: Reward annually the most remarkable environmental initiatives in an appropriate form (award, citation, certificate, etc.).		

10 IMPLEMENTATION STRATEGY

10.1 Implementation mechanism

Technical mechanism

The ECOWAS Directorate of Environment is a promotion and coordination platform. Its role is to promote and monitor the implementation of the Action Plan. For this purpose, the DENV/ECOWAS will organize dialogue and consultations between all the parties concerned. The DENV/ECOWAS has high-level staff specialized in various fields of environmental competence that would be in charge.

However, an analysis of the implementation of the 2008-2014 EAP showed a poor performance of the Directorate in the design of programs and projects to mobilize resources for the implementation of planned activities. Indeed, the available human resource is totally absorbed by the various technical and administrative functions which the Directorate must fulfil. It would therefore be advisable to strengthen the technical team of the Directorate of Environment, in particular, through the establishment of additional frameworks to carry out all the missions required for the preparation, monitoring and coordination of the implementation of the EAP.

For programs whose operational leadership is entrusted to a regional/sub-regional partner organization, for example, CILSS or the Abidjan Convention, the DENV/ECOWAS will retain the monitoring and reporting role for the donors to ensure an effective execution of programs.

Institutional mechanism

The institutional mechanism for implementing the EAP currently in force has all its functions of project management, implementation and control located within the single Environmental Directorate which is isolated. This institutional design which excludes any external critical contribution is obviously not challenging enough to create optimal performance conditions. Moreover, it does not create the necessary conditions to stimulate the participation of other stakeholders who do not feel involved and empowered.

The purpose of the proposed new institutional mechanism is to share the responsibility for the implementation with the political authority through the Environment Ministers, benefit from the technical support and the expertise of other regional institutions and academia to ensure more effective monitoring and more active participation of Member states as source of proposal for a project idea. It is structured at three levels, each one with specific roles and functions.

Meeting of Environment Ministers of ECOWAS Member States:

The meeting of ECOWAS Ministers of the Environment shall be made up of all Environment Ministers in ECOWAS. It shall provide oversight and strategic direction for the implementation of the EAP. In this regard, it shall ensure compliance with the strategic vision defined in the framework of the ECOWAS Environmental Policy and ensure the effective implementation of the EAP. It shall be responsible for adopting the EAP and can decide a review if the changing international or sub-regional environment requires an update before the end of its implementation.

The Council of Ministers shall be chaired by the Minister of Environment of the country holding the Presidency of the Summit of ECOWAS Heads of State and Government. The secretariat shall be provided by the ECOWAS Commissioner for the Environment. Meetings of the Council of Ministers shall be held annually. They may be extended to representatives of international, intergovernmental and regional organizations, cooperation agencies, donors and sub-regional or African civil society organizations, when necessary.

The Steering Committee of the Environmental Action Plan (SC/EAP)

A Steering Committee of the Environmental Action Plan shall be set up by order of the President of the ECOWAS Commission. This committee shall provide technical, project management, scientific and financial advice to DENV/ECOWAS. In particular, the Steering Committee shall approve the projects developed as part of the implementation of the EAP as well as annual implementation reports. It can commission a study to shed light on a given issue and can also decide on field missions for information purposes. These reports shall be presented to the Council of Environment Ministers which shall examine and respond to them.

The chairmanship shall be assumed by the ECOWAS Commissioner for the Environment. The Environment Director shall act as secretary. The SC/EAP shall comprise about fifteen members chosen from sub-regional technical, financial and academic institutions and organizations, whose activities are related to areas of competence of the EAP. These include UEMOA, CILSS, ADB, BOAD, RAMPAO, Abidjan Convention, IUCN, WWF, ENDA, universities, etc.). It shall meet every six (6) months to review the report of the Directorate of Environment on the status of the implementation of the Action Plan and give recommendations for better implementation. It may occasionally be joined by any institution (UNEP, UNDP, FAO, UNESCO, University, Research Center, etc.) or any personality whose participation is deemed necessary to examine a specific issue.

Implementation Unit (IU)

The implementation unit is the operational unit within the ECOWAS Directorate of Environment responsible for the implementation and monitoring of the EAP. In addition to the Environment Director who is in charge of the hierarchical supervision, it shall be made up of current officers of the Directorate of Environment including:

- An environmental communication specialist with proven experience in environmental education/study issues.
- A specialist in development and monitoring & evaluation in the area of environmental and natural resource management. He must have a vast experience in fundraising;

The recruitment of additional staff is a prerequisite to ensure proper implementation of the EAP. Indeed, lack of human resources has been identified as one of the major causes of the poor performance in the implementation of the previous EAP.

Each officer of the technical pool thus constituted shall be fully empowered to monitor a given strategic objective:

- Carry out all selected activities under the EAP;
- Design project documents for the actions and programs identified in the EAP by involving all partner institutions at the national, sub-regional and international levels;
- Seek financing for projects, in particular, through the relevant technical partners, multilateral organizations and regional or international financial institutions.

The Monitoring & Evaluation Officer shall support all the sector heads especially for fundraising activities and ensure the general reporting on the Plan.

National Focal Points

The operational implementation of actions/projects shall be coordinated at the national level by a national focal point appointed for this purpose by order of the Environment Minister concerned. He shall ensure widespread popularization/ownership of the EAP at the national level. He shall serve as a permanent link between ECOWAS and the Member State concerned and shall be responsible for organizing and supervising all the activities carried out under the EAP at the national level and report to the IU. He shall promote and coordinate the development of project ideas at the level of the technical ministries, universities or NGOs and forward them to the IU.

However, the implementation of a project may require the recruitment of a national coordination unit. The latter is then placed under the direct supervision of the national focal point.

10.2 Key partners

ECOWAS Directorate of Environment

The Action Plan is an operational tool for implementing the ECOWAS Environmental Policy from which it is derived. Its implementation is the responsibility of the Environment Director, with the support of its technical staff and under the supervision of the Commissioner for Agriculture, Environment and Water Resources.

The Directorate of Environment is responsible for the design of programs and strategic activities identified for their operational implementation. In addition to the Director, it has a technical staff made up of three (3) high-level engineers (head of division) specialized in the fields of Forest & Wildlife, Environment and Pollution & Nuisances respectively. One (1) engineer specialized in Climate Change (project coordinator) and one (1) engineer specialized in forest management & biodiversity provided by the WABiCC program. The other stakeholders can be grouped into four (4) broad categories:

Public stakeholders

These are the ECOWAS Member States and local authorities which are sub-national structures with autonomy and more or less great capacity for action depending on the content of the decentralization policies of Member States that transfer more or less skills to them.

Member States are the main beneficiaries of projects which ultimately fall under their primary responsibility. They must necessarily participate in the development of projects that concern them and are responsible for the operational implementation of these projects. The states and local authorities are responsible for adopting all legislative, legal or regulatory measures required to harmonize policies and regulations. Often, the requirements of the technical and financial partners will appeal to the states to contribute financially to set up the project.

Like the Member States, the local authorities are institutions whose leaders are elected and legally and legitimately represent the people on their territory. Local authorities therefore have the right to review the projects and programs envisaged on their territory when they relate to the skills which will be transferred to them. They must therefore be associated with the development and implementation of these projects to ensure their sustainability. They have

umbrella structures (associations at the departmental or national level) that can be associated with sub-regional coordinating bodies.

Civil Society (National NGOs, socio-professional organizations, national entrepreneurs)

The implementation of projects and programs requires the involvement and participation of communities that are beneficiaries of these projects. It is one of the characteristics of the democratic development of West African societies that are getting rid of programs designed elsewhere and imposed on them. It is also a criterion for good governance of projects and an indicator of their sustainability.

Socio-professional organizations are formed in all trades and are often represented in the chambers of commerce and industry of cities. These are most often groupings at various levels of commodity chains that can also be organized into inter-professional associations that benefit from the support of certain NGOs that helped them to come together. These professional organizations are often very representative and submit to the rules of internal democracy to choose and replace their leaders. In order to safeguard the interest of grassroots populations, these organizations must be identified and closely involved in all stages of project/program design and implementation.

Similarly, national NGOs that are very active in the field have good knowledge of the local environment and a wealth of experience, particularly in terms of awareness-raising, communication and transfer of new technologies. Their proximity to local populations make them natural advocates of these populations. Their involvement in the development and implementation of programs and projects would improve efficiency.

Women grouped into formal or non-formal associations are also key stakeholders but often marginalized in federal bodies due to prevailing social considerations throughout West Africa. We therefore need a proactive approach to put in place special mechanisms to get around social barriers to effectively involve women in the development and implementation of any program. Moreover, apart from the fact that this gender approach constitutes a requirement for most donors, it is a guarantee of social efficiency of actions, considering the multiple roles that women assume in society.

Regional Programs and Organizations, IGOs

West Africa is made up of many supra national organizations with specific missions in the management of the economy, water, natural resources, marine and coastal resources, meteorology, etc. Due to the cross-cutting nature of the environment, all these organizations

have environmental programs that cover these specific missions. However, ECOWAS must serve as a platform for coordination and synergy to assume natural leadership given to it by its scope and legitimacy. To do this, ECOWAS will have to identify the most relevant strategic partners for each program and organize the necessary dialogue to develop collaboration and encourage the necessary exchanges and synergies.

Like ECOWAS, UEMOA, CILSS and the basin organizations, in particular, are instruments for integration and promotion of economic development with expertise in the environmental management field. They must be closely associated with the entire development, approval, financing and implementation process of the Environmental Action Plan. Some activities will be entrusted to them based on their specific areas of interest. The same is true of other sub-regional or regional organizations. By way of example:

The Abidjan Convention has specific missions on the management and protection of marine and coastal resources. Admittedly, its geographical scope extends well beyond the ECOWAS borders. Nonetheless, all coastal countries are members. As such, the expertise and experience accumulated by this organization make it an essential partner of ECOWAS in the context of the implementation of the Environmental Action Plan. In this regard, a partnership will be developed with international organizations such as IUCN and the Regional Network of Marine Protected Areas in West Africa (RAMPAO).

In the field of climate change, UEMOA and CILSS (AGRHYMET) have a long tradition of supporting countries in the preparation of international negotiations by providing them with technical information and organizing consultation and upgrading sessions for negotiators. This experience must be amplified, better structured and strengthened to meet the objectives of this Action Plan.

In the waste management sector, some organizations have utilized their age-old experience through operational research programs, implementation of field projects or search for funding. These include the Urban Planning and Management Institute (IAGU, Dakar), University of Ibadan (Nigeria), African Population and Health Research Center (APHRC, Nairobi). These organizations could be heavily involved in the specific programs that concern them.

International organizations, development partners

Today, the environment and sustainable development represent an issue of international solidarity in view of the growing interdependence of the community of nations and the need to

preserve the health of the planet for the survival of humanity. Also, many international cooperation programs with technical and financial opportunities are devoted to these sectors.

International organizations and technical partners offer many opportunities in terms of technical, methodological and organizational support due to accumulated experience of implementing many projects around the world. This is also the case for specialized organizations of the United Nations system such as FAO, UNDP, UN-Habitat and UNEP, which also have good fundraising experience.

It is also in this context that we must place the instruments established by the United Nations Convention on Climate Change must be located, such as the Clean Development Mechanism (CDM), Climate Technology Center and Network (CTCN), Green Climate Fund (GCF) that provide technical and financial assistance for the development and implementation of climate projects for African countries.

The bilateral cooperation agencies of the United States (USAID), the European Union, United Kingdom (DFID) and other traditional partners of the ECOWAS countries also offer both technical and financial opportunities. These agencies finance sub-regional projects in the environmental fields that can help in the implementation of the ECOWAS Action Plan. These include, in particular, the WACA program that provides incentives and support for regional climate research programs for universities and institutes of technology as well as adaptation research programs. WACA also supports capacity building programs on climate change issues.

11 FUNDING

The implementation of the EAP requires ECOWAS sub-regional partner organizations and other partners to mobilize financial resources commensurate with the stated ambition. Several types of sources of funding will be targeted:

11.1 Funding sources for the EAP

Internal resources of sub-regional organizations

The DENV/ECOWAS will mobilize its own resources for its budget from general or allocated funds of which a greater part will be allocated to the implementation of the Environmental Action Plan, to give pledge of good will and a signal to external partners who would be solicited for additional funding. For this purpose, DENV/ECOWAS will develop an annual work plan (AWP) for each year as an advocacy tool during the ECOWAS Budget Conference to request for more significant allocation of financial resources.

Similarly, the ECOWAP/RAIP financing mechanism put in place by the ECOWAS Commission to support the implementation of the Community agricultural policy and Community Structural Funds: Regional Integration Aid Fund (RIAF), Regional Fund for Agricultural Development (RFAD) and the Regional Fund for Environmental Management (RFEM) will be used to make a substantial contribution to the implementation of the EAP.

The third source of funding will come from regional partners' own budgets such as UEMOA, CILSS, Abidjan Convention which, like ECOWAS, would mobilize internal resources for the implementation of collaborative programs as part of the implementation of this Action Plan.

Finally, the beneficiary Member States of the projects will provide part of the project financing from their own national budgets allocated to the ministries concerned by the projects developed under the EAP. Member States can also mobilize funds through bilateral or multilateral cooperation as part of their national contribution.

Regional financial institutions

The African Development Bank (ADB) and the West African Development Bank (BOAD) have set up programs and instruments for financing sustainable development in the areas of climate change mitigation and adaptation and forest conservation. They have strategic plans for this purpose. These institutions are positioning themselves to take advantage of the of the carbon market opportunities and as executing agencies of the UNCAC financial mechanisms. They are accredited as regional agencies for the implementation of various climate funds such as Climate

Investment Fund (CIF), Global Environment Facility (GEF) and the Adaptation Fund and act as executing agencies of the Green Climate Fund (GCF). It is very likely that this accreditation will be granted to them because of their proven expertise and experience in the climate finance field.

Similarly, AfDB and BOAD develop close partnerships with cooperation institutions such as the French Development Agency (AFD), German Cooperation Agency (KfW), European Investment Bank (EIB) with whom they have signed protocols/conventions on the environment or climate finance. For this reason, they have gained considerable experience in setting up projects by combining private, public and concessional funds and grants to set up bankable projects that minimize financial risks. Thus, a close partnership between ECOWAS and these financial institutions would help to pool the resources they would be able to mobilize towards bankable projects. In addition, they have advisory services and technical assistance in climate project development and implementation. Finally, they have sectoral policies, procedures and guidelines for intervention in environmental and social management in project financing. They also have funds for project preparation with the strategic objective of making the environment a new development pole by taking advantage of the international opportunities of this finance.

Finally, many initiatives have been launched under the Climate Convention, particularly for the protection of marine and coastal resources, sustainable land management, access to alternative energy in Africa, sustainable agriculture and so on. Many of these initiatives often have sustainable financial resources that will need to be given special attention for the funding of the EAP.

Role of the private sector

While in West Africa the state is the key economic stakeholder, the private sector is nonetheless an important pole for the supply of essential goods and services particularly in the fields of agriculture, forest products, energy, sanitation, etc. and is increasingly becoming one of the keys to sustainable economic development. Moreover, since industries are a source of many nuisances and environmental pollution, a responsible partnership is essential to bring about green growth in different ways, in particular by reducing the environmental impacts of the production process, ensuring efficient use of natural resources and waste prevention. The private sector is the engine of creation and innovation and technological advances, for example, in the area of energy transition.

Areas of cooperation with the private sector may include among others i) public-private partnerships focused on watershed protection or ecological agriculture, ii) energy transition

through the promotion of renewable energies, iii) waste collection and recycling, and more generally, all initiatives to promote circular economy and finally, iv) technological research for the development of substitutes for HCP, in cooperation with universities and institutes of toxicology research.

ECOWAS' action will consist of promoting the setting up of projects through public-private partnership (PPP) helping to achieve environmental goals while offering business opportunities to West African private companies. Moreover, this partnership can have leverage effect when these private companies cooperate with foreign companies that would bring along the benefits of foreign direct investment, technology transfer, access to international markets and access to international financing.

Multilateral funds and international financial mechanisms

United Nations agencies are among the first international financial partners for financing the Environmental Action Plan. These include UNDP, UNEP and FAO whose missions are perfectly integrated within the defined programs. These organizations will also make available the wealth of experience accumulated in the implementation of similar programs.

UNDP, UNEP and FAO are executing agencies of the GEF, financial mechanism of the UNCAC, which provides resources on voluntary or concessional basis for projects aimed at making countries less vulnerable to the negative impacts of climate change and enhance their adaptation capacity. The purpose of the GEF is to improve the environmental status of the planet in six areas of intervention: biodiversity conservation, climate change mitigation and adaptation to climate change, international waters, land degradation, fight against ozone layer depletion » and sustainable management of persistent organic pollutants. Sustainable forest management is a cross-cutting area in developing countries or countries in transition. (See Annex 2)

The World Bank (WB) which is also an executing agency of the GEF is very active in the areas of the environment and natural resource management and has many projects in these sectors in its portfolio. It is endowed with the *Forest Carbon Partnership Fund (FCPF)* specialized in the development, financing and monitoring of carbon projects. This Fund would be the preferred partner of ECOWAS for REDD+ projects.

Similarly, the United Nations has set up *the Strategic Climate Investment Fund (SCF)* to provide financial resources to test new development strategies or broaden the scope of activities focused on a particular climate problem. Within this framework, the Forest Investment Program

(FIP) was established to mobilize increased funding to support programs aimed at reducing deforestation and forest degradation and promote better sustainable forest management and thereby reduce forest GHG emissions. (See Annex 2)

The Multilateral Fund for REDD+ financing also includes the Forest Investment Program (FIP) which is administered by the Climate Investment Fund (CIF) and the UN-REDD Program (See Annex 2).

The European Union and the Islamic Development Bank (IDB) are also strategic partners for the financing of the Action Plan. In addition to these institutions being traditional partners of West African countries, they are committed to the themes identified and have substantial resources for these sectors. This is why the European Union has to its credit, many projects in the climate field and natural resource management. The IDB has projects in the waste management.

Finally, special attention must be given to the *Nordic Climate Facility* (NCF) set up by the Nordic countries with the aim of pooling their contribution to climate finance and making their action more effective. This Fund has substantial resources for LDCs and most ECOWAS countries are eligible countries for this cooperation.

11.2 Funding strategy

The coordination of resource mobilization to finance the EAP is the responsibility of DENV/ECOWAS. Particular attention will be paid to consensus building among all stakeholders in sharing funding among different stakeholders by taking account of opportunities offered by each entity. We recall at this level the need for strengthening the capacities of officers of the Environment Directorate

- For a good understanding of financial tools of MEAs and multilateral partners (World Bank, GEF, etc.)
- Good knowledge of techniques of developing/financing of environmental projects
- Good knowledge of fundraising tools

For external funding, the DENV/ECOWAS strategy will be to support and assist Member States so that they make the most of the multilateral and bilateral financing tools and mechanisms made available to them as well as the financing opportunities under other conventions.

Similarly, one of the most important tasks will be to organize a capacity building workshop for the ECOWAS Environment Directorate team and partner institutions to be better informed

about the multilateral and bilateral mechanisms available as well as the procedures for mobilizing these funds for environmental and natural resource management financing to make the search for funding more efficient.

In addition, as soon as the EAP is adopted, the Environment Directorate will organize a donors' round table to present the EAP to the technical and financial partners on one hand, and on the other, to establish a strategic partnership for each EAP field of activity, target potential partners on the basis of their commitment and thus develop projects according to their specific outline. A dashboard of technical and financial commitments will be drawn up to follow-up the round table.

This activity will be extended through targeted advocacy meetings with potential financial partners to have a better understanding of their respective priorities and areas of interest and, on this basis, build a dynamic partnership.

Annex 1

Table 4 Evaluation matrix for the implementation of the Action Plan 2008-2014

ECOWAS Environmental Policy		Sector Strategy Papers	
Strategic areas	Strategic objectives	Targeted issues	Activities carried out
Strengthening Environmental Governance and the Promotion of Capacities	Establish a high level permanent consultation and coordination mechanism (institutional) for environmental policies and initiatives in the sub-region	SRAP/DC Undertake model development and comprehensive analysis of CC institutions in the region and make recommendations for better coordination, mergers and development	Sectorial Environment Ministers Committee act as high level permanent consultation mechanism
	Establish and support the functioning of a regional technical dialogue for monitoring and promotion of the implementation of Conventions	SRAP/DC Strengthen communication infrastructure and networking of organizations and institutes in the region working on CC field SRAP/DC Strengthen the capacities of focal points and negotiators to prepare for the Conference of Parties (COP). SRAP/DC Strengthen the capacities of Meteorological, Hydrological and Food Security Departments to store and manage	Sub-regional CC Adaptation & Vulnerability reduction strategy is developed Sub-regional Dialogues Preparatories for UNFCCC COPs were organized

		information in a coherent and synergistic manner PA/PC Promote research on hazardous chemicals/ ICCM for alternatives	Regional meteorology program is developed
	Promote the monitoring of environmental changes and risk prevention by setting up an AD Hoc technical tool (Observatory, Regional Center) for environmental monitoring	SRAP/DC Provide training and equipment for the strengthening of regional research technical institutions and networks involved in the observation, storage and data collection, information management and model development and weather forecasting related to CC	Regional Environmental monitoring Framework is developed
	Promote appropriate partnerships to improve sub-regional cooperation on multilateral environmental agreements	PA/PC Set up an information exchange and early warning network on prevention and illegal trafficking of hazardous chemicals	–
Promoting sustainable management of resources to improve the sub-regional economy in an environment friendly manner	Improve sustainable management of natural resources on the basis of the principles, criteria and indicators established in this area ;	FCP . Knowledge about forest dynamics status . Set up a sub-regional strategy for the identification, development and protection of phylogenetic resources	Regional Forest Convergence Plan is developed
	Promote Planning, Conservation and Sustainable Development Of Forest, Wildlife and Pasture	FCP . Support the management of forest ecosystems . Establish development standards . Conserve the biodiversity of forests and protected areas . Conserve marine and coastal ecosystems, mangroves and wetlands, threatened species and water resources . Wood, Wildlife, NTFP and Tourism sectors are valued . Promotion of green economy in forest and wildlife management	National Investment programs developed by Member States Wildlife trafficking Strategy under development
		SRAP/DC Support the integration and use of protected area systems as climate change risk management tool	SRAP-CCD is developed
	Fight against land degradation and desertification	PCF Promote reforestation	

Organized fight against pollution and nuisances, urban waste and flows of hazardous substances in the sub-regional economy	Improve urbanization policies and urban management policies taking into account environmental aspects		
	Develop and implement a permanent support program for the treatment of waste and hazardous substances	<p>PA/PC (chemicals)</p> <p>Develop and harmonize the legal and regulatory framework for the management of hazardous chemicals</p> <p>PA/PC</p> <p>Promote accession of ECOWAS countries to international conventions on risk prevention and safety in the use of chemicals at work</p> <p>PA/PC</p> <p>Promote the use of clean technologies in the production of substitutes for chemicals</p> <p>PA/PC</p> <p>Build staff capacity for product identification and control</p>	<p>Regional strategies on Chemicals & hazardous waste management were developed</p> <p>Sub-regional action plan for the management of hazardous chemicals is developed</p> <p>Ongoing development of plastic waste management strategy and regulation</p>
	Promote a sub-regional Environmental Education Program	<p>FCP</p> <p>Promote environmental education at the national level</p>	
Promotion of environmental information, education and communication in the sub-region	Strengthen information and communication (IEC) activities in environmental management in ECOWAS and UEMOA	<p>FCP</p> <p>Inform and communicate with stakeholders in the sub-region on the sustainable management of forest and wildlife resources</p>	
	Promote and encourage initiatives contributing to better citizen training and recognition of the efforts of institutions and individuals in the ECOWAS -UEMOA Community	Gathering all the success stories from individuals & Institutional and celebrate them	
		<p>SRAP/DC</p> <p>Regional institutions (ECOWAS, UEMOA) provide countries and economies with policy, technical and financial support in their climate change adaptation process.</p>	<p>Pool of Experts for GCF projects established</p> <p>Regional strategies and plans developed</p>
		SRAP/DC	

Not covered		Conduct a review of existing regional economic policy and political organizations and give recommendations	
		SRAP/DC Conduct a comprehensive evaluation of the food production sector across the region and develop a detailed policy and action plan to ensure that food security in the region is adapted to climate change scenarios within the framework of ECOWAP.	a comprehensive evaluation of the food production sector across the region and develop a detailed policy and action plan to ensure that food security in the region is conducted
		SRAP/DC Conduct a regional scientific study to predict the impacts of climate change on the health sector and develop a response strategy	
		SRAP/DC Review laws, policies, plans and environmental and agricultural programs on logging and health issues throughout the region. Evaluate the efforts being made to integrate climate change into these laws, policies, plans and programs. Propose a revised approach across the region	
		SRAP/DC Support projects for the protection of coastal areas and infrastructure against rising sea levels.	ECOWAS is partner of WACA project
		Create a small grant fund for national agencies and NGOs, preferably with a focus on the most vulnerable segments of the society to fund new adaptation and grassroots development models that could be replicated across the region	
		PA/PC Set up a special fund for the management of hazardous chemicals	
		PA/PC Study the impact/epidemiology of hazardous chemicals on human health	

Annex 2: Key UN Mechanisms for Environment and Climate Financing

Key UN mechanisms for environment and climate financing

1. Global Environment Facility (GEF)

The GEF, financial mechanism of the UNCAC, provides, on a free or concessional basis, new and additional funding to cover the incremental costs of measures to improve the environmental status of the planet in six areas of intervention: "Biodiversity", "climate change mitigation and adaptation", "international waters", "land degradation", "ozone depletion" and "persistent organic pollutants" with sustainable forest management as a cross-cutting area in developing countries or countries in transition. To help countries take action on technology transfer and climate change adaptation, the GEF is funding projects intended to make countries less vulnerable to the negative impacts of climate change and to enhance their adaptation capacity. To this end, it has put in place mechanisms to support adaptation measures. These are: (i) the Strategic Priority Special Fund, (ii) the LDC Fund, (iii) the Climate Change Special Fund, (iv) the Climate Change Adaptation Fund and (v) Sustainable Forest Management Project. Projects funded under these four initiatives will seek to implement adaptation policies and measures in all development sectors, including water, agriculture, energy, health and vulnerable ecosystems.

2. Adaptation Fund (AF)

It was created specifically to finance adaptation projects and programs led by developing countries, signatories to the Kyoto Protocol, which are particularly vulnerable to the impacts of climate change. The Fund is supervised and managed by a board that includes representatives from each of the five regional groups of the United Nations.

The Global Environment Facility (GEF) provides the secretariat for the Adaptation Fund Board on an interim basis. Similarly, in accordance with decision 1 / CMP.13, the World Bank serves as the administrator on an interim basis.

3. Green Climate Fund (GCF)

It was announced in Copenhagen at the end of 2009 and officially created in 2010 by the Cancún agreements. The fund is in response to a strong demand from developing countries for concessional financing to support their transition to a low-carbon, climate resilient development model. It operates under the auspices of the Conference of Parties and support projects, programs, policies and other activities in developing country parties, both in the private and public sectors. The COP has set itself the goal of mobilizing 100 billion dollars a year by 2020 to meet the needs of developing countries. 50% of the resources mobilized will finance adaptation and 50% mitigation.

4. Strategic Climate Investment Fund (SCIF) / Forest Investment Program (FIP)

The Strategic Climate Investment Fund (SCF) was created to provide financial resources to test new development strategies or to broaden the scope of activities focused on a particular climate issue, or sectoral measures in targeted programs. A Forest Investment Program (FIP) was established as a targeted program under the SCF to mobilize substantially increased policies, measures and funding to facilitate the reduction of deforestation and forest degradation and to promote better sustainable forest management. The main purpose of the FIP is to support developing countries' efforts under the REDD program by providing bridging loans at the beginning of the process to finance program preparation. The FIP also funds public and private investments identified as part of national efforts to put in place a REDD readiness strategy. It provides this funding, taking into account opportunities to help these countries adapt to the impacts of climate change on forests and to contribute to various activities to improve the environmental state, such as the preservation of biodiversity, protecting the rights of indigenous peoples and local people, reducing poverty and improving living conditions in rural areas. The FIP also funds initiatives to eliminate the underlying causes of deforestation and forest degradation and to overcome the obstacles that have hindered efforts to date to achieve these goals, and in so doing, reduce emissions and protect forest carbon stocks.



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