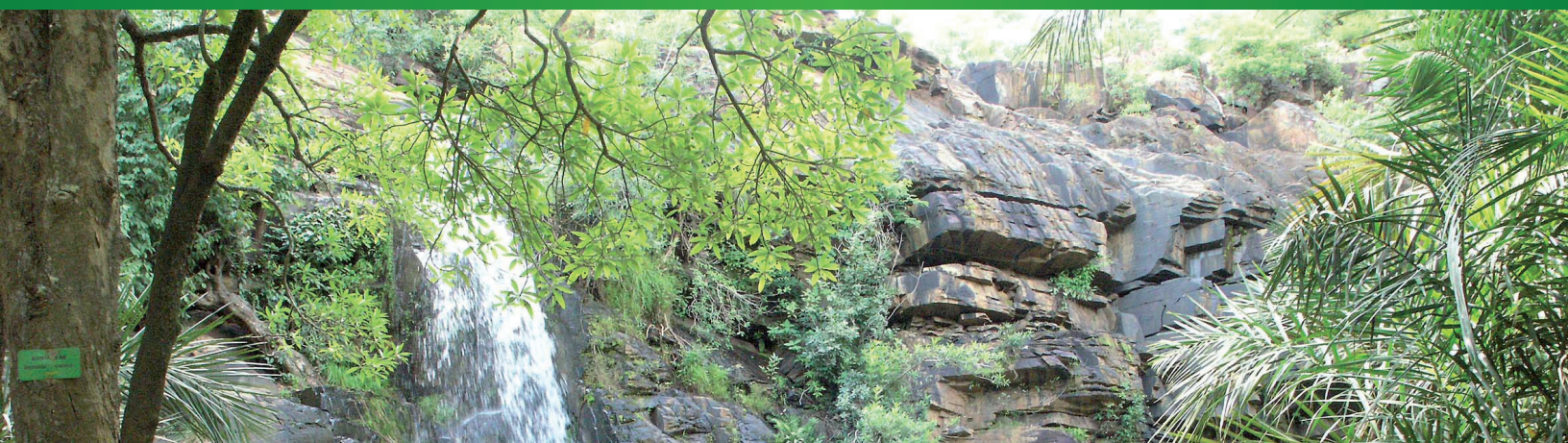




A PLATFORM FOR STAKEHOLDERS IN AFRICAN FORESTRY

THE GREAT GREEN WALL OF SAHARA AND SAHEL INITIATIVE, CLIMATE CHANGE AND GENDER ISSUE



AFRICAN FOREST FORUM WORKING PAPER SERIES

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The Great Green Wall of Sahara and Sahel Initiative

Climate change and gender issues

Maisharou Abdou

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Acronyms and abbreviations

AMCEN	African Ministerial Conference on the Environment
CAADP	Comprehensive African Agriculture Development Programme
CEN-SAD	Community of Sahel and Sahara States
CMAE	Conférence des Ministres Africains de l'Environnement
COP	Conference of Parties
CQRAP	Consolidated Quinquennial Regional Action Programme
DLDD	desertification, land degradation and drought
ECOWAP	Agricultural Policy of ECOWAS
ECOWAS	Economic Community of West African States
GGWSSI	Great Green Wall of Sahara and Sahel Initiative
IPCC	Inter-governmental Panel on Climate Change
MDGs	Millennium Development Goals
NAP	National Action Programme
NEPAD	New Partnership for Africa's Development
NWFPs	Non Wood Forest Products
PA/GGWSSI	Pan-African Agency of the Great Green Wall for the Sahara and Sahel Initiative
PPCSTF	Partnership and Cooperation of Scientific, Technical and Financial Platform
RAP	Regional Action Programme
SRAP2	Sub-Regional Action Programme for Combating Desertification in West Africa and Chad, Second phase
SRAP/CD	Sub Regional Action Programme for Combating Desertification in West Africa

SRAP	Sub Regional Action Programme
UNCBD	United Nations Convention on Biological Diversity
UNCCD	United Nations Convention on Combating Desertification
UNFCCC	United Nations Framework Convention on Climate Change
WAEMU	West Africa Economic and Monetary Union

Executive summary

African countries have been facing several environmental challenges related to climate change and desertification. To cope with these challenges, several efforts have been made by individual countries to implement projects and programmes related to desertification control, management of natural resources and to the improvement of living conditions and incomes of people, particularly in rural areas. At technical and institutional levels, policies and strategies have been developed by African countries to strengthen their commitment to implementing regional and global initiatives, such as the three United Nations Conventions on Biological Diversity, Climate Change, and on Combating Desertification. But it has recently been realised that these individual efforts have great limitations as challenges often go beyond national borders.

In this regard, CEN-SAD (Community of Sahel and Sahara States) Leaders and Heads of States adopted in June 2005 in Ouagadougou (Burkina Faso) the Great Green Wall Initiative as an afforestation programme to respond to the combined effects of natural environmental degradation, droughts and desert encroachment. The concept evolved to an integrated rural development programme that addresses combating desertification, land degradation and deforestation, and improving the livelihoods of local people.

The initiative has later been endorsed by the African Union as a Pan-African initiative with an agency created in 2010 by 11 Sahelian desert frontline countries to oversee the implementation of the initiative in the participating countries. Some of these countries, with the support of international and regional institutions, have developed and adopted their national strategies and plans for the implementation the initiative and established their national agencies.

The Pan-African Agency of the Great Green Wall for the Sahara and Sahel Initiative (PA/GGWSSI) developed a consolidated action plan of implementation based on national documents. Most of these (strategies and actions plans of implementation) were developed based on agreed pillars of interventions with the aims of containing natural resources degradation, including forest and tree resources, and improving the social and economic welfare of communities. Also cross-cutting issues, such as gender and vulnerable groups, are considered. National strategies and international conventions and policies were also considered in order to align the initiative to national and international environmental agreements.

The implementation stage of the action plans differs from one country to another based on the level of financial resources mobilisation.

All stakeholders supporting this process at national and regional levels have been acknowledged with recommendations to improve the way they support the initiative. The African Forest Forum, being a strong platform for African forestry, should play a key role in assisting both individual countries and the Pan-African Agency with technical, political and advocacy support.

CHAPTER 1 Introduction

The phenomenon of a fluctuating climate, e.g. with varying rainfall patterns, has been experienced in Africa since time immemorial. But the phenomenon of land degradation can be dated back to the more recent introduction of cash crops and timber exploitation in West Africa, mainly cotton and peanuts in the Sahelian countries, and coffee, cocoa and pineapple in coastal countries. From the introduction of such crops and of timber exploitation in colonial times until today, the important goal has been to ensure maximum production without sufficient regard to the need to restore the land for lost nutrients and soil erosion caused by the intensive cultivation (CEDEAO-CSAO-OCDE, 2008). This land degradation process has increased from the late 1960s when climate events characterised by long periods of drought, which culminated in the recurrent drought periods of the 1960s, 1970s and 1980s, were added to the action of man.

Today, no country in the sub-region is spared, especially with the increasing needs of the ever growing population. The old forms of land use which reflected a more harmonious balance between man and environment have given way to unsustainable forms of land management. In fact, with a population of over 225 million people, i.e. about 30% of Africa's total population and with almost 85% of its area under acute influence of land degradation and recurrent droughts, West Africa is today characterised generally by endemic poverty and strong dependence of the population, mainly rural, on natural resources. In this sub-region, the reduction of rural poverty depends to a large extent on improving the capacity of poor people to earn their livelihood and incomes from natural resource (CEDEAO-CSAO-OCDE, 2008).

Desertification is closely linked to climate change and loss of biodiversity, because it profoundly affects the modes of production and consumption. In its Second Assessment Report (IPCC, 1995), the Inter-governmental Panel on Climate Change (IPCC) highlighted the close link between climate change and desertification. Indeed, land degradation results in loss of biodiversity and contributes to climate change. In turn, climate change is causing land and biodiversity degradation, while the restoration of degraded land may help protect biodiversity, mitigate the effects of climate change and can help adapt to climate change impacts (IPCC, 2007).

Water erosion of fertile soils on arable land poses a serious threat to the achievement of food security. Soil salinization due to high evaporation during droughts combined with low rainfall and high sunshine, and intense human activities (irrigation) across the sub-region, lead to disturbances in the balance of agricultural systems. Thus, in the Sahelian Sub-region, the consequences of desertification are reflected, among others, in:

- i)* a disruption of agricultural cycles and cropping on infertile soils under the effect of wind and water erosion; and
- ii)* an important migratory movement motivated by the search for better living conditions.

In compromising food production, desertification aggravates famine and starvation in areas already affected by poverty. Following the desertification process, land becomes more fragile, resulting in a significant reduction of its resistance to natural climate variability.

Several efforts have been made by countries at technical, financial and institutional levels to implement projects and programmes related to desertification control, management of natural resources and the improvement of living conditions and income of the populations, particularly in rural areas. At technical and institutional levels, policies and strategies have been elaborated by West African countries to strengthen their commitment to implementing regional and global initiatives, such as the United Nations Convention on Combating Desertification (UNCCD), the United Nations Framework Convention on Climate Change (UNFCCC), and the United Nations Convention on Biological Diversity (UNCBD).

Also, in response to the change of the institutional context in the areas, new policies and programmes were developed and/or adopted, including:

- ▶ the Environmental Policy of the Economic Community of West African States (ECOWAS);
- ▶ the Regional Action Programme for the Integrated Management of Water Resources (RAP/IWRM);
- ▶ the New Partnership for Africa's Development (NEPAD) Environmental Programme;
- ▶ the Common Policy for Environmental Improvement of the West Africa Economic and Monetary Union (WAEMU);
- ▶ the Common Agricultural Policy of ECOWAS (ECOWAP);
- ▶ the Comprehensive African Agriculture Development Programme (CAADP);
- ▶ the second generation of the Sub-Regional Action Programme to fight against desertification in West Africa and Chad (SRAP2); and
- ▶ other new initiatives that could inspire more visibility and efficiency of sub-regional efforts.

This African Forest Forum (AFF) study on the evaluation of the inclusion of climate change aspects into policies, strategies and plans for the implementation of the Great Green Wall for the Sahara and Sahel Initiative (GGWSSI) by the national implementing structures, and

the sub-regional and regional institutions, especially the Pan-African Agency of the Great Green Wall for the Sahara and Sahel Initiative (PA/GGWSSI), seeks to analyse the innovations introduced by GWSSI in the consideration of aspects related to enhancing adaptive and resilience capacities of the concerned populations to climate change and variability. The specific objectives of the study are to:

- i)* foster awareness on forests and climate change issues and promote appropriate changes in policies and practices;
- ii)* build and improve capacity to address forest related climate change issues; and,
- iii)* ensure that production, adaptation, mitigation and policy processes involving forests and trees are backed by sound information

CHAPTER 2 Regional policy, programmes and strategies for sustainable resources management

GENERAL BACKGROUND

Countries in the Sahel-Saharan zone of Africa have always been constrained by low rainfall. Recently, this has been combined with adverse effects of anthropogenic actions, mainly intensification of land and biological resources use, which have seriously affected the broad ecological balances of the area, causing degradation of natural resources and declining production in agriculture, livestock management, forestry and fisheries, all contributing to keeping people in poverty and food insecurity. To reverse this trend, several efforts have been made by countries and regional and sub-regional organisations on technical, financial and institutional aspects, e.g. by formulating and adopting several policies and strategies, implementing projects and programmes on combating desertification, and improving living conditions and income of people, especially in rural areas. However, despite significant efforts, results obtained so far are still inadequate to tackle the acute and complex challenges faced. Furthermore, a crucial lesson learnt from these experiences is that no country, on its own, has the technical, human and financial resources to meet these major environmental constraints. There is, therefore, the need for supportive, integrated and coordinated regional approaches for the management of natural resources and environmental protection. Some such initiatives, strategies and programmes are described below.

REGIONAL AND SUB-REGIONAL EFFORTS FOR SUSTAINABLE RESOURCES MANAGEMENT

In the context of combating land degradation, and improving environment and forest resources management in West Africa, many initiatives, programmes and strategies are under implementation by regional and sub-regional institutions. Some of these initiatives are introduced hereafter.

The Comprehensive Africa Agriculture Development Programme

The Comprehensive Africa Agriculture Development Programme (CAADP) is the agricultural programme of the NEPAD, which in turn is a programme of the African Union (AU). Established by the AU Assembly in 2003, CAADP focuses on improving food security and nutrition, and on increasing incomes in Africa's largely farming-based economies. It aims to do this by raising agricultural productivity by at least 6% per year and increasing public investment in agriculture to 10% of national budgets per year. NEPAD is responsible for driving economic integration in Africa, while CAADP aims to eliminate hunger and reduce poverty through agriculture. The programme brings together key stakeholders - at continental, regional and national levels - to improve coordination, share knowledge, successes and failures, to encourage one another, and to promote joint and separate efforts to achieve the goals. CAADP addresses policy and capacity issues across the entire agricultural sector on the African continent. It is an entirely African-led and African-owned programme and represents African leaders' collective vision for agriculture.

The Strategic Programme for the Reduction of Vulnerability and Adaptation to Climate Change in West Africa

The international conference on *“Reduction of vulnerability to climate change in natural, economic and social systems of West Africa”*, held in Ouagadougou in January 2007, recommended the development of a sub-regional action programme to reduce the vulnerability of West Africa and Chad to climate change. The design of this programme has been entrusted to the Economic Community of West African States (ECOWAS), the Inter-State Committee for fight against drought in the Sahel (CILSS), the Economic Commission for Africa (ECA) and the African Centre of Meteorological Applications for Development (ACMAD). This commitment was reaffirmed at a Ministerial Meeting of the Dialogue on Climate Change, held in November 2008 in Cotonou (Benin) and the West Africa Economic and Monetary Union (WAEMU) was designated to join ECOWAS and others for the formulation of the programme.

A Strategic Programme for the Reduction of Vulnerability and Adaptation to Climate Change in West Africa was developed through a participatory process whose vision is that: *“by 2030, the countries of West Africa have all human, technical and financial resources required to protect their human and natural systems from the adverse effects of climate change”*. The overall objective of the programme, i.e. *“to develop and strengthen the resilience and the adaptation capacities in the sub-region to address climate change and extreme weather events”*, is based on instruments and initiatives developed at regional and sub-regional level for achieving sustainable development and the Millennium Development

Goals. It takes into account strategies and programmatic frameworks developed by sub-regional bodies in the fields of environment, water, agriculture and forestry, such as ECOWAP, SRAP/CD, etc.

The ECOWAS Sub-regional Action Programme for Combating Desertification

To tackle desertification, land degradation and drought (DLDD) as major constraints to economic and social development of African countries, is the major goal of the UN Convention for Combating Desertification (UNCCD). ECOWAS has elaborated and is implementing a sub-regional programme on this matter for West Africa.

The main objective of the SRAP/CD was to *“create mechanisms for the management of shared natural resources which could effectively address cross-border issues related to land degradation and desertification and provide support for the smooth implementation of national action programmes”*. The evaluation of implementation of the first phase of this sub-regional programme, which was adopted in June 1999 by the Heads of State and Government of ECOWAS, highlighted many achievements on its eight priority areas. However, the absence of a shared vision of the SRAP/CD has resulted in:

- i)* malfunctioning of the operational mechanisms;
- ii)* malfunctioning of governance mechanisms of sub-regional programmes; and
- iii)* difficulty in mobilising financial resources for funding the programme.

The second phase of SRAP/CD (SRAP2) is formulated in conjunction with the adoption of the ten-year (2008-2018) Strategic Programme of the UNCCD. It responds to the twin concerns of the now 17 countries of ECOWAS and CILSS for improving the implementation of the UNCCD in the sub-region by:

- i)* exploiting the complementarities and convergence with the new policy and institutional frameworks for rural development in the sub-region to consolidate a shared vision for the sustainable management of natural resources undertaken by the SRAP1;
- ii)* improving management of environmental challenges in terms of synergies between the three Rio conventions; and
- iii)* satisfying the requirements of the decision 3/COP 8 calling for alignment of NAP, SRAP and RAP to strategic and operational objectives of the ten-year (2008-2018) Strategic Programme of UNCCD.

The ECOWAS Environmental Policy

The ECOWAS Environmental Policy aims at reversing the state of natural resources degradation, improving environmental and livelihood quality, conserving biological diversity for ensuring a productive and improved ecosystem health, and increasing the well-being of people. Its strategic objectives, from which a coherent set of activities were developed to provide sustainable solutions to major environmental problems of the region, were organised into the following components:

- ▶ Promotion of environmental governance (establishing a sub-regional mechanism) and capacity building;
- ▶ Promotion of sustainable resource management to improve the regional economy with respect to the environment;
- ▶ Promotion of better understanding and better management of Pollution and Nuisances and flow of dangerous goods in the sub-regional economy;
- ▶ Promotion of Information, Education, Research and Environmental Communication in the sub-region.

This Environmental Policy is mainly founded in the array of principles governing the sub-regional institution, viz.:

- ▶ Principle of Continuity, which requires that actions already started and some areas of the previous programme are still valid and should be taken into account;
- ▶ Principle of constant reference to the Millennium Development Goals (MDGs);
- ▶ Principle of minimising duplication to ensure synergy and coherence in the multiplicity of stakeholders;
- ▶ Principle of accountability, or the “polluter pays” principle;
- ▶ Principle of iteration and periodic revision: this policy is an initial approximation which must be periodically revisited by adjustments and updates;
- ▶ Principle of inter-disciplinarity: the environment is a set of sectors, processes and interfaces, and therefore environmental policy should cover interacting economic, social and ecological factors;
- ▶ Principle of irreversible people's participation.

The Great Green Wall of Sahara and Sahel Initiative

The GGWSSI is an African initiative for addressing environmental challenges such as climate change, desertification, drought, and degradation of land and ecosystems, all processes whose impacts are exacerbated in the Sahel. It contributes to the creation of a new African strategy dealing with environmental hazards. It fits well into the overall Global Alliance against these environmental challenges and has its origins in the strong belief and commitment by countries in Sahara and Sahel to break with fatality and face these threats which impact their developmental efforts. It also marks the emergence of African leadership and concerns to strengthen commitments for implementing global and regional initiatives, such as UNCCD, UNFCCC, UNCBD, and CAADP of AU.

The overall vision of GGWSSI is to mobilise all stakeholders to address desertification and environmental degradation in synergy with actions of natural resource management. The global objective of GGWSSI is to improve the livelihoods of local communities in the Sahel and Sahara regions through sound management of ecosystems in the belt between the isohyets of 100 mm and 400 mm, a sustainable development of existing natural resources, desertification control and rural poverty alleviation.

To achieve this ambitious overall objective, integrated thematic areas of interventions were identified, including:

- ▶ Conservation/enhancement of specific ecosystems in Sahel and Sahara, and the biodiversity they contain;
- ▶ Restoration/conservation of degraded soils to improve agricultural, pastoral, forestry and fisheries productivity;
- ▶ Diversification of production systems;
- ▶ The satisfaction of domestic needs (for wood and/or non-wood products);
- ▶ Improving the livelihoods of people by increasing their incomes through the promotion of income generating activities and the creation of socioeconomic basic infrastructure;
- ▶ Improved capacity to sequester carbon in the ground cover and soil.

REGIONAL AND SUB-REGIONAL EFFORTS FOR IMPLEMENTING THE GGWSSI

Since the launching of the initiative through the establishment of the Pan-African Great Green Wall Agency in June 2010 in N'Djamena (Chad), by the 11 desert frontline countries, many efforts are underway, including the sensitisation of national, sub-regional and

international institutions for effective support of its implementation. These efforts include the formulation and adoption of implementation plans at all level and mobilisation of financial resources. At regional level, the two main implementation documents are described below.

The Pan-African Agency's Regional Action Plan for the GGWSSI

As the implementing Coordination Unit of the GGWSSI, the Pan-African Agency has formulated a regional consolidated five years action plan based on some countries' national action plans and upon an agreed layout. The plan was adopted in December 2011 in Khartoum by the Council of Ministers.

This operational action plan is based on four paradigms, viz. *"Conservation, Protection, Restoration and Development"*. It is translated on the ground into the implementation of programmes and projects with the objectives of conservation, restoration and protection of natural resources, and for socio-economic development through community development actions and local governance. It also relies on sound monitoring and evaluation systems and on the regular assessment and observation of programmes' effects and impacts on people and their environment. It requires the identification and implementation of thematic and operational scientific research support efforts through partnerships and cooperation established with a regional network of research and training centres of excellence for the production of scientific data and results relevant to the GGWSSI, as well as the collection and exploitation of traditional knowledge.

The Consolidated Five-year Regional Action Programme (CQRAP), in its development, is based on an inclusive bottom-up approach. Planning and implementation of programmes and projects put the *"Village Territory and the Community"* in the centre. The management strategy is based on three vehicles – Communication, Consultation, and Capitalisation – and on three lines of action such as:

- i) information sharing and outreach activities,
- ii) exchange of experiences and knowledge, and
- iii) capacity building and technical management for the benefit of institutional and socio-economic groups. It also relies on the Partnership and Cooperation of Scientific, Technical and Financial Platform (PPCSTF) - a statutory advisory body of information sharing, consultation, monitoring and evaluation of implementation actions and impacts on humans and the environment, and networking of scientists and operational centres of research and training.

The diversity of interventions and stakeholders, the complexity of challenges and the specific issues in different eco-geographical zones make it necessary for the Pan-African

Agency of GGWSSI to focus on the overall strategy for the implementation of the Regional Consolidated Action Plan.

The African Union Harmonised Strategy

As the political Coordination Unit of the Great Green Wall Initiative of Sahel and Sahara, the African Union Commission (AUC) has formulated a harmonised strategy for the implementation of the initiative. The document has redefined the concept as: *“not only to create a forest from East to West Africa, although the concern of strengthening forest cover is treated with the utmost attention, but as a set of integrated interventions affecting cross-cutting issues that affect the lives of the peoples of the Sahel and Saharan areas of Africa”*. These multi-sectorial and multi-dimensional interventions affect a wide range of concerns. These include the sustainable management of natural resources, the sustainability of rural production systems (agriculture, livestock, forestry, etc.), the development of rural production and marketing infrastructures of rural products, the diversification of economic activities and the creation of wealth, taking into account gender and youth development.

The document has broadened the geographical intervention zone of the initiative. Thus, given the alarming situation in areas surrounding the Sahel/Sahara region, the GGWI should also act on both sides of the Sahel/Saharan zone. Hence, the initiative does not only concern the 11 original signatory countries of the PAGGW Convention, but all countries in the Circum-Saharan area, including island enclaves such as Cape Verde. Table 1 below summarises the forest and climate change issues as portrayed in the above regional and sub-regional programmes.

Table 1. Forest, climate change and vulnerable group issues in regional and sub-regional programmes and initiatives

Programme	Key forest-climate change objectives	Other related objectives	Programme	
			Achievements	Constraints
Comprehensive Africa Agriculture Development Programme (CAADP)	Environmentally sound agricultural production and sustainable management of natural resources	More equitable distribution of wealth for rural populations - in terms of higher real incomes and relative wealth.	May 2011, 26 countries had signed the compact and incorporated the CAADP Compact into their agricultural agenda	Not identified as from now
			Many countries have exceeded the target of 10% of National Budget for Agriculture and most countries have made significant progress towards this goal.	
Strategic Programme for the Reduction of Vulnerability and Adaptation to Climate	Develop and strengthen the resilience and the adaptation capacities in the sub-region to address climate change and extreme weather events	Strengthen the scientific and technical sub-region in reducing vulnerability to climate change.	Under review and adoption by member countries	Not reported as from now
		Promote the integration of climate change issues into development policies, strategies, programmes and projects at the sub-regional and national levels.		

Programme	Key forest-climate change objectives	Other related objectives	Programme	
			Achievements	Constraints
Change in West Africa		Develop and implement programmes and projects sub-regional and national climate change adaptation		
ECOWAS Sub-regional Action Programme for Combating Desertification, 2nd phase	Restore, enhance and sustain the productive and protective functions of ecosystems shared by two or more countries, creating conditions for national and sub-regional actors to develop initiatives for ensuring sustainable management of land resources (water/ soil/vegetation/ wildlife).	Improve the living conditions and assure food security in arid and semi-arid zones of West Africa.	Under review and adoption by member countries	Not reported as from now
		Improve the status of trans-boundary and/or shared ecosystems		
		Establish effective partnerships (management of trans-boundary and/or shared resources) between partners at local, national, regional and international levels in order to accelerate the implementation of the UNCCD		
ECOWAS Environmental Policy	Reversing the state of natural resources degradation, improving environmental and livelihood quality, conserving biological diversity to ensure a healthy, productive, improved ecosystem, and well-being	Promotion of environmental governance (establishing a sub-regional mechanism) and capacity building.	Under review and adoption by members countries	
		Promotion of sustainable resource management to improve the regional economy in respect of the environment.		
		Promotion of better understanding and better management of Pollution, Nuisances and flow of dangerous goods in the region.		
		Promotion of Information, Education, Research and Environmental Communication in the sub-region.		

Programme	Key forest-climate change objectives	Other related objectives	Programme	
			Achievements	Constraints
Great Green Wall of Sahara and Sahel Initiative (GGWSSI)	Mobilise all stakeholders to address desertification and environmental degradation in synergy with the actions of natural resource management and taking into account the need to improve the livelihood of local communities in the Sahel and Sahara zones.	Promote the conservation/enhancement of specific eco-systems in the Sahel/Sahara zone, and their biodiversity.	Implementation documents formulated and adopted by member's countries and field activities in progress in many countries.	External financial resources mobilisation.
	Improve livelihoods of local communities in Sahel/Sahara region through sound management of ecosystems between the isohyets of 100 mm 400 mm, a sustainable development of natural resources, desertification control and rural poverty alleviation.	Restore/conservate degraded soils to improve agriculture, pastoralism, forestry and fisheries	Some countries still lagging behind in formulating (Mauritania) and adoption (Mali) of their implementation documents	National resource mobilisation in many countries
		Diversify production systems		
		Satisfy domestic needs (for wood and/or non-wood products).		
		Improve the lives of people by increasing their incomes through the promotion of income generating activities and the creation of socioeconomic basic infrastructure.		
		Improve the capacity of ground cover and soil of carbon sequestration		
Regional Consolidated	Contribute to the operationalization of GGWSSI through sound	Promote sustainable activities of restoration, conservation, protection and utilisation of land, biodiversity, water resources and forestry	Adopted by the Council of Ministers of	Resource mobilisation for the

Programme	Key forest-climate change objectives	Other related objectives	Programme	
			Achievements	Constraints
Action Plan for the implementation of the GGWSSI (PAGGW)	monitoring/evaluation, assessment and observation of programme impacts on people and their environment.	through efficient management of natural resources and trans-boundary and/or shared ecosystems.	member countries in December 2011.	implementation of identified activities
		Strengthen and diversify the agricultural and pastoral production and processing systems.	Will be submitted to the incoming Summit of Heads of States and Governments	
		Promote agro-silvo-pastoral and socio-economic activities capable of ensuring wealth creation and satisfaction of the needs of populations (timber and/or non-wood forest products).		
		Establish observatories for better monitoring of the state of natural resources in Sahelian arid zones		
		Establish a technical platform for supporting research and training and knowledge management through a network of research and development and promote operational research and scientific mobility in the GGW space		
		Improve the living conditions of local communities and reverse migration flow to the restored areas.		
		Improve CO2 sequestration in vegetation cover and soils through the implementation of strategies and techniques for sustainable and efficient land use and land use changes.		
AU Harmonised Strategy for the	Improve resilience of human and natural systems in the	Strategic objectives: Improve living conditions of people in the drylands of Africa and make them less vulnerable	Adopted by the experts meeting	Not yet reported

Programme	Key forest-climate change objectives	Other related objectives	Programme	
			Achievements	Constraints
implementation of the GGWSSI	Sahel/Saharan areas faced with climate change, through sound ecosystem management and sustainable development of natural resources (water, soil, vegetation, flora and fauna), protection of rural material and immaterial heritage, the creation of rural production and sustainable development nodes and improving the living conditions and livelihoods of people living in these areas.	to climate and variability, and drought		
		Improve the status and health of ecosystems of dry lands in Africa and their resilience to climate change and variability and drought	To be submitted and adopted by Council of Ministers and Heads of States and Government	
		Mobilise resources for implementing the GGWI by building effective partnerships between national and international actors.		
		Operational objectives: To actively influence relevant mechanisms and actors at inter-national, regional, national and local levels to effectively address the problems of desertification/land degradation and drought in the Sahara and Sahel areas.		
		Work towards the establishment of enabling environments for search of sustainable solutions to fixing dry lands populations on their territory and assure them equitable and peaceful access to land.		
		Improve knowledge on the social, economic, biophysical and cultural dynamic of the arid zones		
		Mobilise financial and technological resources at the national, bilateral and multilateral levels, and ensure their better targeting and coordination to increase their impact and effectiveness.		

CHAPTER 3 GGWSSI national strategies and action plans and the role of women, youth and vulnerable groups

For the implementation of GGWSSI at local level, regional institutions have formulated key recommendations for the participating countries. These include:

- ▶ capitalisation and sharing of different experiences acquired in the establishment of the greenbelts, green dams, etc.;
- ▶ consideration of existing initiatives and the development of synergies, complementarities and sound coordination with on-going projects and programmes so as to avoid duplication and improve interventions effectiveness;
- ▶ application of integrated and comprehensive approaches of planning which clarify and strengthen links between the different dimensions of the environment and areas of intervention;
- ▶ need to involve local communities, since the roles of indigenous and local communities remain fundamental in the successful implementation of the GGWSSI;
- ▶ need to improve local ownership of the initiatives and interventions, and strengthen project management by local communities; and,
- ▶ partnerships seen as contracts of trust between the different actors involved in implementing the initiatives to achieve the common defined goals on the basis of their respective concerns related to land occupation/use.

Based on these recommendations, most Sahelian countries have elaborated their implementation action plans and strategies, taking into account their national specificities and particularities. Some of the particularities of these action plans are highlighted below from the point of view of the roles and incentives provided for the vulnerable groups, mainly women and youth.

ROLE AND INCENTIVES OF VULNERABLE GROUPS IN THE GGW NATIONAL ACTION PLANS

Burkina Faso

In Burkina Faso, issues related to gender and vulnerable groups are taken into consideration right from the definition of the overall objective of the GGW, which clearly states: *“to contribute to a better land productivity and improve the living conditions of populations using best sustainable land, natural resources and environment management practices in order to achieve the Millennium Development Goals (MDGs), adapt and mitigate to climate change”*. This issue is more specifically stated in objective 1 of the action plan entitled: *“improve food security in the priority area of intervention through the implementation of multifaceted and integrated actions of sustainable land management and promotion income generating activities”*.

The issues are further clarified in the principles and methods of implementation of the Burkina Faso’s GGW Action Plan of which some of the most pertinent elements are:

- i) the stakeholder participation and consultation at all levels, including women and young;
- ii) the participative, shared and inclusive programmatic approach for the identification, implementation, monitoring and evaluation of fields activities; and
- iii) the consideration to the gender, youths and minorities, vulnerable and marginalised groups through the identification of specific activities.

Republic of Mali

In Mali, the GGWSSI action plan aims at developing local communities via innovative and inclusive approaches and synergy between actions for combating desertification and those of land restoration, biodiversity conservation, development of agro-silvo-pastoral productions systems, development of basic socioeconomic infrastructures, and of wealth creation through the implementation of income-generating activities for contributing to food security and stable recovery of a sustainable economic growth.

The gender and vulnerable group issue is taken into consideration in one of the action specific objectives, which states: *“meet domestic demand (for wood products and/or non-wood), increase revenue through the promotion of income-generating activities and the installation of basic social infrastructure”*. The concern is fully elaborated in some activities that directly consider women and youth as the players and the beneficiaries of the initiative.

Niger Republic

In Niger, gender and vulnerable group issues are emphasised in the main thematic areas of the action plan. The operational strategic axis 1 and 2, titled “*Promotion of good governance of natural resources and Local Development*” and “*Improvement of food security through the development and sustainable management of agro-silvo-pastoral production systems*”, fully consider the issue which is further clarified in the following programmes and sub-programmes:

- ▶ Programme 2: “Promotion of Local and Community Development in the area of intervention of GW”;
- ▶ Sub-programme 2.2: “Development of basic socioeconomic infrastructures”;
- ▶ Sub-programme 2.3: “Development of wealth creating activities and improvement of the nutritional health of the populations”; and
- ▶ Sub-programme 3.2: “Improve food security through the development of agricultural and pastoral production systems via:
 - i) the mobilisation of groundwater and runoff;
 - ii) the promotion of the emergence of new farms, livestock and wildlife; and,
 - iii) the strengthening of traditional agricultural production systems”.

Federal Republic of Nigeria

In Nigeria, the concern of women, youth and vulnerable groups in general is taking into consideration right from the definition of the GW vision, which underlines the “*sustainable use of natural resources to provide a buffer against poverty*”. This concern is further developed in the two strategic objectives:

- i) Development and promotion of sustainable agricultural practices that enhances local livelihoods whilst maintaining the productivity and stability of agricultural lands; and
- ii) Improvement of living conditions of people in areas affected by desertification and reducing their vulnerability to climate change and variability, and to drought. These accord high priorities to the issue as clearly stated in the implementation activities.

Senegal Republic

In Senegal, while creating and consolidating a line of defence via afforestation activities, GWSSI seeks to effectively contribute to integrated rural development in the concerned areas and alleviate poverty for sustainable development. Concern for vulnerable groups is

stated in specific objective 1 of the action plan - *“promotion of agro-silvo-pastoral income generation activities for the satisfaction of basic needs of rural populations (wood and NWFPs)”* - and the activities identified under the following two results:

- i) support infrastructures for diversified and sustainable agro-silvo-pastoral production;
and
- ii) identify and develop promising value chains, mechanisms and instruments to ensure stable sources of income for people to improve their well-being.

Table 2 below summarises women and youth issues as they appears in the above national implementation action plans and strategies.

Table 2. Roles and incentives for women and other vulnerable groups

Country	Global objective	Specific objectives	Related objectives	Progress in implementation	
				Achievements	Constraints
Burkina Faso	Contribute to better land productivity and improve living conditions of people using best sustainable land, natural resources and environment management practices in order to achieve the MDGs, adapt and mitigate to climate change.	Treat the environmental and social impacts of other human initiatives affecting sustainable land management.	Improve food security in priority area of intervention through implementation of multifaceted and integrated actions of sustainable land management and promotion income generating activities.	Action plan adopted.	High population growth and needs to satisfy.
		Consolidate and strengthen SLM practices and the environmental protection through the promotion of scientific research achievements and implementation of developmental communication			High poverty level
		Coordination, consultation, and monitoring and evaluation activities of the GGW action plan.			High environmental degradation
					Shortage of financial resources and multiple priorities
Mali	Contribute to the fight against desertification in an integrated approach of valuing the degraded areas of the Sahel through the sustainable management of natural resources and	Conduct an inventory and establish benchmarks of eco-systems and basic socio-economic infrastructures of the intervention areas of the GGW.	Develop income-generating activities	Process of adoption	High population growth and needs to satisfy.

Country	Global objective	Specific objectives	Related objectives	Progress in implementation	
				Achievements	Constraints
	poverty alleviation.	Prevent and mitigate food crises and other natural disasters.	Develop sustainable financing mechanisms for activities for poorest rural populations through promoting SLM practices in the GGW intervention area and create an enabling environment for implementing GGW in Mali.		High poverty level
		Create conditions for good governance in management of natural resources and an enabling environment for institutional capacity building, technical and financial local SLM			High environmental degradation rate
		Develop agricultural, pastoral and forestry resources in the GGW intervention area 2 and enhance pastoral zones in the GGW intervention area 1.			Shortage of financial resources and multiples priorities
		Restore soil fertility for increased agricultural production and improve and manage pastoral, forest and wild-life resources in the GGW areas of intervention			Political crises.
		Rehabilitate and preserve ecosystems along the River Niger, and diversify and intensify production systems.			

Country	Global objective	Specific objectives	Related objectives	Progress in implementation	
				Achievements	Constraints
		Implement an integrated extension and development support design.			
		Improve performance of the rural sector through research support and knowledge management in the GGW area			
Niger	Contribute to development of local community through innovative and inclusive approaches creating synergy between desertification control activities and bio-diversity conservation, adaptation and mitigation to climate change and improvement of agro-silvopastoral production systems for sustainable food security and poverty alleviation.	Promotion of good governance of natural resources and local development:	Strengthening the capacities of local actors.	Adopted in 2011.	High poverty level.
		Promotion of governance of natural resources, and,	Development of basic socioeconomic infrastructure.	Activities implemented in the field but support from national finances not sufficient.	High population growth and needs to satisfy
		Sustainable management of natural resources	Development of wealth creating activities and improvement of the nutritional health of populations.		High environmental degradation rates
		Improvement of food security through the development and sustainable management of agrosilvopastoral production systems:	Improvement of food security through the development of agricultural and pastoral production systems via:		Shortage of financial resources and multiple priorities

Country	Global objective	Specific objectives	Related objectives	Progress in implementation	
				Achievements	Constraints
		Improve agroforestry production through restoration of degraded land, such as:	mobilisation of groundwater and runoff;		
		i) the restoration and conservation of degraded agri-cultural lands through SWC/DRS and reforestation;	promotion of the emergence of new farms, livestock and wildlife;		
		ii) the restoration and preservation of forest stands damaged by the work of gathering and infiltration; and,	Strengthening the capacities of traditional agricultural production systems		
		iii) the promotion of in situ and ex situ conservation of biodiversity			
		Research support and knowledge management:			
		Development of advice and support to all rural stake-holders			
		Capitalisation and protection of scientific and local knowledge generated or collected during the implementation of GGW activities			

Country	Global objective	Specific objectives	Related objectives	Progress in implementation	
				Achievements	Constraints
Nigeria	Consolidate, strengthen and accelerate National action programmes for combating desertification through implementation of a comprehensive and coordinated approach to restore degraded land and improve the rural infrastructure and livelihoods of Nigeria’s drylands.	Conservation and rehabilitation of degraded and affected lands, and protection of areas susceptible to land degradation and desertification.	Development and promotion of sustainable agricultural practices that enhances local livelihoods whilst maintaining the productivity and stability of agricultural lands.	Adopted in 2012	High population growth and needs to satisfy.
		Improvement of information sharing and cooperation among stakeholders at all levels.	Improvement of the living conditions of people living in desertification affected areas and reduce their vulnerability to climate change, climate variability and drought.		High environmental degradation rate
		Strengthening of systemic and institutional capacity to combat desertification and its impacts.			High priorities to satisfy and limited financial resources.
		Improvement of knowledge on desertification and drought phenomena, and monitoring and evaluation of its effects.			
		Improvement of the status and health of ecosystem in the arid zone and their resilience to climate change, climate variability			

Country	Global objective	Specific objectives	Related objectives	Progress in implementation	
				Achievements	Constraints
		and drought.			
		Mobilisation of resources for implementing the GGW initiative through establishment of efficient partner-ships between national and international stakeholders.			
Senegal	Creating and consolidating a line of defence via afforestation activities to effectively contribute to integrated rural development of the concerned areas and alleviate poverty through sustainable development.	Support the conservation and enhancement of bio-diversity through diversification of sustainable land management.	Promote agrosilvopastoral income generation activities and satisfy the basic needs of rural populations (wood and NWFPs).	Adopted since 2008.	
		Improve CO2 sequestration in soils and vegetation cover through implementation of sustainable strategies for soil and water restoration and conservation.		Implementation in the field with support from international and national sources	

THE GGWSSI NATIONAL ACTION PLANS: CLIMATE CHANGE ADAPTATION, MITIGATION AND INCENTIVES TO VULNERABLE GROUP

Climate change adaptation and mitigation

The issue of climate change and mitigation is clearly stated in most of the member countries' strategies and action plans as seen above. To achieve the ambitious visions and objectives of GGWSSI, countries have formulated and adopted these strategies and plans considering adaptation measures – innovative and traditional – as a major thematic subject area. Also, most plans contain afforestation and reforestation actions for mitigating the effects and impacts of climate change at local and national levels, as indicated in table 2.

Incentives to vulnerable groups of women and youth

It is very important to recall that the overall objective of GGWSSI is to improve the livelihoods of local communities in the Sahel and Sahara region. This can be achieved through sound management of ecosystems, sustainable development of natural resources, desertification control and rural poverty alleviation, including:

- ▶ conservation of specific and particular Sahel and Sahara ecosystems and the biodiversity they contain;
- ▶ restoration/conservation of degraded soils to improve agricultural, pastoral, forestry and fisheries productions;
- ▶ diversification and intensification of production systems;
- ▶ satisfying domestic needs of rural people for wood and/or non-wood products;
- ▶ improvement of living conditions of people through promotion of income generating activities and creation of basic socioeconomic infrastructures; and
- ▶ improvement of the ecosystems' capacity to sequester carbon in the ground cover and soil, thereby mitigating climate change.

That is why most countries' strategies and action plans for implementation of the initiative have put local people in general, and vulnerable groups (women, youth and minority groups) in particular, at the centre of activities, either as actors or beneficiaries, or both. It is clearly understood that the primary beneficiaries of the impacts of successful implementation of the GGWI action plans are grass-root communities in affected areas who depend more or less entirely on natural resources for their means of livelihoods and socio-

economic well-being. In most countries, the major identified thematic areas and incentives for the beneficiaries include:

- ▶ Promotion of sustainable activities of restoration, conservation, protection and utilization of land, biodiversity, water resources and forestry through the efficient management of natural resources and of trans-boundary and/or shared ecosystems;
- ▶ Strengthening and diversification of agricultural, forestry and pastoral production and processing systems;
- ▶ Promotion of agro-silvo-pastoral and socio-economic activities capable of ensuring wealth creation and satisfying basic necessities and livelihood needs of local people in terms wood and non-wood forest products;
- ▶ Maintenance and enhancement of basic socio-economic infrastructures for providing health, education, communication infrastructure, household energy, water, transport, and other services for improving the living conditions of people;
- ▶ Improvement of living conditions for local communities within their territories, in order to reverse the migration flow to restored areas;
- ▶ Protection and sustainable management of water bodies and the promotion of aquaculture production and of animal proteins;
- ▶ Improvement of living conditions of people residing in desertification affected areas and reduction of their vulnerability to droughts, and to climate change and variability, through ground water mobilisation and establishment of productions systems independent of rainfall.

To fully achieve these objectives, some prerequisite measures have been identified by countries for full empowerment of, and instilling a sense of ownership of the activities in, local beneficiaries to ensure continued implementation of them, even in the absence of financing. These measures include:

- ▶ capacity building of stakeholders to enhance sustainable management of natural resources;
- ▶ involvement of all stakeholders (local, technical services, NGOs and Civil Society) in the implementation of identified actions, in order to have a broad popular ownership and thus ensure sustainability of investments;
- ▶ the necessity to conduct information, awareness and education campaigns through a sound communication plan of resources mobilisation for the implementation of GW Action Plans;

- ▶ improvement of information sharing and cooperation among all stakeholders; and,
- ▶ giving due consideration to women, youth, minorities, and to vulnerable and marginalised groups, through the identification of specific actions, such as income-generating activities.

CHAPTER 4 Conclusions and recommendations

GGWSSI is an African led and promoted programme for combating environmental challenges caused by climate change and variability, including frequent droughts, land and ecosystems degradation, whose impacts are exacerbated in the Sahel and Sahara zones. It is a New African Strategy dealing with environmental hazards and poverty alleviation. It fits in the overall Global Alliance against environmental challenges and originates in the strong belief and commitment of Sahara and Sahel countries' Heads of States and Governments to break with the sense of fatality and instead tackle all the environmental threats which strongly impact the developmental efforts of individual countries. It also marks the emergence of an African leadership in support of African concerns in the implementation of three United Nations Conventions (UNCCD, UNFCCC and UNCBD) from a common vision and a shared strategic framework.

The analysis of the various implementation documents show that all action plans have placed the implementation focus of the initiative on the adaptation of biophysical and human (agriculture, animal husbandry, etc.) systems to the effects and impacts of climate change and variability. Special attention is also given to the mitigation role that Sahelian fragile ecosystems may play through the management of forest and woodland resources, rehabilitation of degraded land through afforestation and reforestation of millions of hectares of land identified in all implementation documents.

Also, from the analysis of the various action plans and strategies, and particularly of the overall and specific objectives and ambitious expected results identified by implementing agencies, it is clear that, if properly implemented, GGWSSI could lead to the improvement of living conditions of people in general. Such improvement of livelihood conditions of people living in these areas, most especially rural vulnerable groups of women, youth and minorities, have been clearly stated as goals in most of the implementation action plans and strategies. In some country documents (Burkina Faso, Nigeria and Senegal), gender issues were highlighted and appropriate measures and incentives identified to ease their sufferings of women. In the rest of the countries, appropriate measures and incentives were identified for the vulnerable, but the gender issue itself was mentioned alongside several other national priorities.

Also, the analysis of the various action plans show that the successful implementation of GGWSSI depends on a number of factors, including:

- ▶ capitalizing on, and sharing of, different experiences acquired in the establishment of the greenbelts, green dams, etc.;
- ▶ taking into account existing initiatives and the development of synergies and coordination of effective interventions;
- ▶ application of more integrated and comprehensive approaches of planning, which clarify and strengthen links between different environment dimensions and different areas of intervention;
- ▶ the need to involve indigenous and local communities, as the roles of these remain fundamental to the successful implementation of GGWSSI;
- ▶ the need for ownership of the process and strengthening the involvement of local beneficiary communities in the project management;
- ▶ establishment of partnerships, as contracts of trust, between different actors involved in the implementation of the initiative so as to achieve the common defined goal on the basis of their respective concerns related to land occupation/use; and,
- ▶ mobilisation of important national and international financial support.

From the above mentioned analysis, the following recommendations have been formulated:

For participating countries:

- 1) efforts should be made at the appropriate time to revisit the action plans, taking into consideration the climate change induced impacts, to make more integrated and completed up-dates of the plans;
- 2) efforts should be made to mobilise internal resources, traditional and innovative, making functional the various funds created during the formulation of the three UN Conventions, such as environmental, climate, carbon, forestry and other funds;
- 3) give more and full support to the national implementing agencies by providing them with adequate resources (financial, technical and institutional) for the smooth implementation of the adopted action plans;
- 4) countries willing to join the Initiative should follow the regulatory procedures stated by the current law.

For the African Union we recommend:

- 1) the implementation of the various recommendations from Heads of State and Governments (Malabo resolution, 2010), the Council of Ministers of the GGW (N'Djamena, March, 2011), the AMCEN/CMAE (Arusha, 2012), and the GGW Experts

Meeting (Banjul, 2012), all of which call on AU to solve the institutional dilemma of the Pan-African Agency of the Great Green Wall as the technical arm of AU for coordinating the implementation of the GGW programme, and for AUC to coordinate resources mobilisation for the implementation of GGWSSI;

- 2) the mobilisation of necessary resources for the participating countries and partners for efficient and effective implementation of GGWSSI as charged by Heads of State and Governments.

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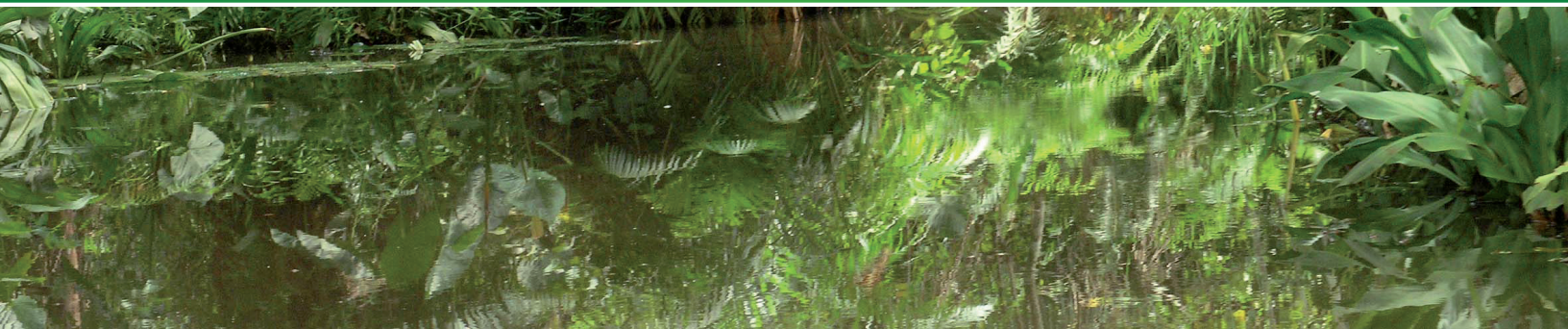
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