

PREPARATION OF THE GGW DOCUMENT PROJECT
TERMS OF REFERENCE

I. CONTEXT

For the past many decades, the Sahelo-Saharan countries have been facing continuing rainfall shortages which, coupled with anthropogenic factors, has severely disrupted the great ecological balances, resulting in the degradation of natural resources, soils and a fall in agricultural productions all of which are indicative of an almost inexorable process of desertification.

Such a context of severe aridity has pushed most countries of the Sahelo-Saharan zone into a precarious food and energy security situation and poverty. Depopulation is one of the populations' natural responses to environmental hostility, lack of adequate facilities and pauperization of the arid zones. Indeed, despite the tremendous efforts made here and there to conceive consistent and efficient agricultural, forestry and pastoral policies, and a few occasional successes, one has to admit that the results achieved in terms of effective strategies and policies remain short of targets.

Many institutions have been established to fight desertification and drought. These include the Inter-State Committee for Fight against Desertification in the Sahel (CILSS), the Sahara and Sahel Observatory (OSS), the Intergovernmental Agency against Drought and Desertification in Eastern Africa (IGADD) later known as the Inter-governmental Development Agency (IGAD). Furthermore, since the signing, in Paris, in October 1994, of the international agreement on the fight against desertification, many national and regional action plans have been drawn up and huge financial resources mobilized. However, the outcomes from these actions and initiatives have appeared to be very mixed. In fact, none of the reforestation and protective efforts, production system enhancement, hydro-agricultural schemes and micro-finance associated with these initiatives have been able to promote rural development and reverse the desertification process.

II. NEW VISION

II.1. conceptual and strategic approach

In Saharo-Sahelian countries, the problematic of sustainable development is a recurrent one and the need to think of other alternatives requires a change of paradigm. The new vision rests on an approach that creates some synergy between the actions aimed at fighting desertification and mitigating the consequences of drought and those that are intended to develop the potentials available in the areas concerned. According to Mr. Abdoulaye WADE, President of the Republic¹ of Senegal “ ***the desert must be colonized and domesticated***”. In other words, instead of

witnessing the populations deserting these arid and semi-arid zones (and seek refuge in Sudanian and Guinean zones), everything must be done to develop natural resources and promote human settlements there. This is a multisectoral approach based on the identification and exploitation of economic potentials (mining, energy, agriculture, water, etc.) and the establishment of mechanisms designed to fight desertification and ensure environmental restoration.

Individually, countries of the arid and semi-arid zones do not have sufficient technical, human and financial means to face up to these major constraints. Accordingly, there is an urgent need to set up regional and sub-regional cooperation mechanisms as part of an overall and coordinated approach. The “Great Green Wall” initiative with a Sahara/Sahel interface perfectly fits into such political options.

While creating and consolidating a defense line through reforestation and laying out activities, conceptual approach will be to contribute efficiently to the integrated development of the rural areas crossed by the Wall and to the actions aimed at poverty reduction within the framework of sustainable development through **the expected effects and impacts**. However, the changes that occur in the biophysics, pedological and cultural contexts make a case for the consideration and integration of local specificities. Therefore, the implementation of such a project will be based on a **Regional Project Document (RPD)**, which would have studied and grasped the different constraints and implementation procedures.

In view of GGW innovative nature and continental scale, it appears absolutely necessary to consider undertaking prior studies on the zones in the coverage area of GGW final layout. The studies will focus notably on the reference ecological, socio-economic and infrastructural situation. The information and data that will be collected will make it possible to identify and control all project advantages and constraints and to draft RPD on the basis of the objectives indicated earlier herein.

The **Conceptual Chart Document** or **Project Design Document (PDD)** prepared and adopted at the meeting of African Ministers in charge of Environment and Water Resources held, in Dakar, in March 2006, determines the strategic approach, the objectives and results expected, GGW Regional Project development strategy as well as an overview of the indicative layout criteria. It also defines the institutional framework for coordination and monitoring.

The same ministerial meeting looked into and adopted the indicative layout criteria and the vegetal species adapted to the eco-geographic zones marked by severe aridity (between 100 and 400 mm).

II.2. Political Implementation Framework

II.2.1. African Union

At the 8th Ordinary Meeting of the Conference of Heads of State and Government held, on January 29 and 30, 2007 in Addis-Ababa, Ethiopia, the African Union adopted Declaration 137 (VIII) approving the “Great Green Wall” Initiative.

II.2.2. NEPAD :

NEPAD presents an environmental initiative, along with an action Plan prepared by the African Ministerial Conference on the Environment in connection with the UN Environment Program (UNEP)

II.2.3-. The Community of Saharo-Sahelian States

African countries’ political willingness to promote the development of the Sahara was materialized by the constitutive treaty of the Community of Saharo-Sahelian States, CEN-SAD signed on February 4, 1998. This community today has 23 member States.

On March 14 and 15, 2003, the 5th Meeting of the Conference of Leaders and Heads of State held, in Niamey, Niger, adopted at the initiative of His Excellency Mr. Abdoulaye WADE, President of the Republic of Senegal, the decision to establish a Sahara Development Authority (AMVS).

The 7th Ordinary Meeting of Leaders and Heads of States of CEN-SAD member countries held, in Ouagadougou, Burkina Faso, on June 1 and 2, 2005 welcome the idea of erecting a Great Green Wall going from Dakar to Djibouti, expressed by His Excellency Olusegun OBASANJO.

The Sahara Development Authority is designed as a cooperation tool for the development of the Sahara. Its objective is to favor cooperation among member States with a view to a rational and judicious exploitation of all potentials. Within this framework, the GGW project appears to be one of the major projects of the afore-said Authority.

The GGW initiative is a major project whose specific objective is to bring together all the countries concerned in a unique battle, to restore and develop the natural resources found in the zones crossed by the Wall. It thus appears to be a very relevant element of the Sahara Development Initiative.

III. GGW MAJOR PROJECT

III.1. Major Objectives

The overall objective is to contribute to the fight against desertification and to develop the Saharo-Sahelian zones in order to ensure sustainable natural resource management and poverty reduction.

The specific targets pursued include:

- 1- biodiversity conservation/development;
- 2- soil restoration/conservation;
- 3- operating system diversification;
- 4- meeting household needs (in terms of ligneous and/or non-ligneous products) and promoting income-generating activities;
- 5- enhancing carbon sequestration in vegetal covers and soils.

GGW Initiative also provides for many human development mechanisms such as Sustainable Development, Clean Development and Poverty Reduction.

III.2. GGW Description

GGW is a multi-species vegetation band running from Dakar to Djibouti and located in the Sahelian zone with an average rainfall wavering between 100 mm and 400 mm. It includes various land use systems such as:

- **national landmarks:** reserved forests (managed by the State), community forests (village, communal, rural community forests etc.), private forests (belonging to individuals or private groups);
- old (outcome of projects in the zone) or new **artificial plantations** (to be created including private forests):
- **agro-sylvo-pastoral units:** annual orchading, wooded hydro-agricultural perimeters, wooded parks, water retention pond;
- **pasturelands:** village or intercommunity ones;
- **safari parks**
- **migratory fauna corridors**
- **community fauna reserves**
- **national parks:** fully or in part
- **wild-flower sanctuaries:** for vegetal biodiversity conservation,

- **deferred grazing area:** in more or less degraded forest areas
- **orchards:** fruit growing

Green units will be managed by the local populations individually or in groups, private producers, research / training structures, local communities or by the forestry services.

At the operational level, each country involved with the Wall will build an average five (5 km) wide national section along the Overall Indicative Layout (OIL).

III. 3 Expected Effects and Impacts

The building of the Green Wall in these arid and deprived regions will have very positive effects and impacts on the populations and their living environment. More specifically, GGW will ensure integrated development and produce various effects and impacts on its coverage area.

The expected effects and impacts include:

1. **slowing soil erosion:** the presence of vegetal cover slows winds speed and favors rain water infiltration;
2. **degraded soil restructuring:** an increase in organic matter of vegetal and animal origin entails soil restructuring;
3. **higher reforestation rate in countries crossed by GGW:** in order, among others, to restore eco-climatic balances and biodiversity;
4. **revival, development and diversification of agriculture and stockbreeding,** both in terms of vegetal and animal production volumes and size of the active population employed in these sub-sectors;
5. **vegetal and animal biodiversity restoration, conservation and development,** the deferred grazing and other privately-owned wooded areas contribute to natural vegetation regeneration and return of wildlife: birds, small game, snakes, etc.
6. **increasing coverage of local needs in forest products,** especially firewood, lumber and also ligneous and non-ligneous products: gum, resins, roots, leaves, barks, fruits, pharmacopeia etc.
7. **improved living standard and health** due to noticeable improvement in nutrition, living environment and more easily available household needs (water, energy, social infrastructures etc);
8. **reversal of rural migration phenomenon,** gradually, “ecological migrants” and the bones and sinews looking for employment will repopulate these zones that have been rehabilitated by GGW proximity.

9. **control of water resources**, through water retention pond, artificial lakes and hydraulic schemes that will contribute to enhanced production system

III. 4. Beneficiaries

GGW effects and impacts will benefit various categories of actors including:

1. **international community**, as indeed, GGW perfectly intersects international concerns for Clean Development Mechanism: reduction of greenhouse gas, carbon sequestration, reducing ecological and economic migrations;
2. **States**: find in it an opportunity to reactivate their ecosystem conservation and restoration programs, especially forests and soils, but also those on poverty reduction and food security;
3. **local communities**: regions, municipalities and rural communities find in GGW a tool to boost local development through the recovery of agricultural productions, reduced unemployment, and more generally, through higher income;
4. **primary producers**: farmers; herdsman; coalmen; gum, honey and resin harvesters; healers; hunters; wood carvers; etc. While for farmers, GGW will expand cultivable zones and productivity of cultivated zones, for the remaining primary actors, more importantly it will increase the availability of raw materials.
5. **private businessmen**: who are initiators of safari parks, modern farming, ecotourist sites find in it some economic opportunities etc ;
6. **educational, training and research structures**: GGW will be a privileged site for regional multidisciplinary research allowing great mobility of African scientists and increased synergy in program implementation;
7. **populations living in GGW coverage area**: in addition to offering greater possibilities of fuelwood, gathering, fodder and water access, they find important opportunities to reduce under-employment, migration and poverty.

III. 5. Identifying GGW Overall Indicative Layout (OIL)

III.5.1. GGW Indicative Layout Criteria

GGW layout does not encroach on the Sahara. It is located in the Sahel where average rainfall is between 100 mm and 400mm. It is about 5 km wide, linear and continuous as far as possible. However, in the face of certain factors, the layout may be discontinued and rerouted north or further south.

These factors include:

- steams : river, lakes;
- rocky mountain or hill;
- flat but stony terrain impossible to revitalize;
- wetlands;
- urban center;
- would-be sacred or haunted zone according to local populations.

One of the decisive ecological factors is rainfall. Indeed, while GGW longer section will cross inhabited areas and equally long portion will also run through inhabited areas and its maintenance will then depend only on the rains. This is why GGW should always be situated in latitudes where annual average rainfall is above 100 mm. Nonetheless, the presence of a network of water retention ponds will attenuate rainfall shortage.

Since GGW runs through inhabited zones (village soil zones), its maintenance can be assured by the local populations, and its management in uninhabited areas (reserved forests, national parks, safari parks, wild-flower sanctuaries, community reserves) handled by the public services, local communities or private concerns.

III.5.2. GGW Structure and Composition

GGW plant associations are dominated by the species that all have drought-adaptation mechanisms.

Vegetal species should meet in particular the following major criteria:

- they must have ecological plasticity such as would allow them to live and develop in ecological zones with up to 100 mm rainfall;
 - they must be useful to the populations' needs and the environment;
 - they must be common to many neighboring countries crossed by GGW layout;
1. Species selection consists in:
 - identifying the species most adapted to arid and semi-arid zones and necessary clues on the conditions of successful production and transplanting of seedlings in the eco-geographic zones crossed by the layout;
 - promoting agroforestry;
 - favoring economically profitable existing species and also accepted by the populations especially fruit forests which contribute to the nutritional balance of the populations and poverty reduction;
 - taking into consideration the populations' needs in species selection with a view to meeting most of their needs in ligneous and non-ligneous products.

III.5. 3. Determination of National Component Layout

GGW National Component layout is specified for individual countries by their national experts. However, it must be integrated into overall layout and take into account the parameters defined hereinafter.

IV. REGIONAL PROJECT DOCUMENT, RPD

IV.1. Introduction

Drafting GGW project document implies prior identification of reference situation through the collection and analysis of data on GGW coverage area.

The Conceptual Chart or Project Design Document also proposes, in addition to strategic approach, objectives and expected effects and impacts, the following coordinating institutional chart:

- two Sub-regional Coordinating Units (SRCU) to handle coordination and monitoring in two (2) defined Regional Components: **West** (Senegal, Mauritania, Mali, Burkina Faso, Niger and Nigeria) and **East** (Chad, Sudan, Ethiopia, Eritrea, Djibouti);
- a National Coordinating Unit (NCU) in each country crossed by GGW, assisted by a National Technical Committee;
- a GGW Pan African Agency under the supervision of the Supreme Development Authority, to be responsible for GGW Regional Coordination;

The Conceptual Chart (GGW Project Design Document) which has already been validated is used as a benchmark for the preparation of the Terms of Reference of GGW Project Design Document.

IV.2. Preparation of GGW Project Document

IV.2.1- Planning

a) Overall Objective: identifying GGW layout and structure and defining an efficient and performing strategy for good coordination of GGW building activities.

b) Specific Target: finalizing a consensual framework for implementing and coordinating GGW-related national and sub-regional interventions.

IV.2.2. Expected Outcomes

The expected outcomes relate to the following aspects:

Outcome₁: *Reference situation has been determined for arid and semi-arid zones;*

Outcome₂: *Developments in the biophysics context have been fully controlled;*

Outcome *3: GGW social and environmental impacts have been well identified;*

Outcome *4: Production system enhancement operations have been tested and approved and GGW layout and composition identified and adopted.*

Outcome *5: An actor organizational chart for participatory and sustainable management and a coordinating and communication strategy have been proposed;*

Outcome *6: The (human, financial, technical and logistical etc...) resources needed for GGW project implementation have been identified and evaluated;*

Outcome *7: GGW operational documents have been prepared and adopted;*

Outcome *8: Funding sources, mechanisms and terms for resource mobilization to finance GGW have been identified.*

IV.2.3. GGW Project Document Preparation Strategy

The following has been considered to harmonize interventions in the two groups:

1. consultations (C) are held concomitantly by two groups in the two sub-regional components (East and West) and in individual countries;
2. SRC work will be coordinated by an expert-designate and at individual country level by the National Coordinating Unit (NCU);
3. the two documents produced by the two sub-regional components will be consolidated by an ad hoc committee made up of national and international experts;
4. the provisional project document will be validated and adopted in the wake of countries at a meeting of Sectoral Ministers;
5. the mandate has been set to last 12 months and in accordance with the chronogram indicated in the Project Design Document (Conceptual Chart);
6. regional coordination will be handled by a GGW Pan African Agency under the institutional supervision of the High Authority Development of the Sahara (HADS).

IV.2.4. – Contracts, Studies and Research

Contracts, Studies and Research have been proposed for GGW Project Document preparation mandate.

Component 1: The Reference Situation of Arid and Semi-arid Zones has been clearly established

The purpose here is to analyze the reference situation of arid and semi-arid zones which are likely to be covered by the Great Green Wall. This analysis will focus on the following domains:

- forest and vegetation;
- agriculture;
- water resources;
- energy resources;
- stockbreeding;
- wildlife;
- soils, land use and real estate;
- cultural and socio-economic context;

Activities under Component 1 (Act.1) include:

Act.1.1: determining ecological averages (climate, water, soil, flora and fauna) and the level of vegetal cover in layout;

Act.1.2: studying the sociology and household needs of those living the arid zones ;

Act.1.3: establishing demographic references;

Act.1.4: studying the real estate system;

Act.1.5: characterizing economic activities;

Act.1.6: determining the poverty level of the populations living in GGW coverage area,

Act.1.7: characterizing the types of economic and social infrastructures.

Component 2: Analyze Developments in Biophysics and Ecological Framework (Act.2)

Act.2.1: study and map out soils and geological formations;

Act.2.2: study and map out river systems, land use (vegetal cover, relief, human settlements etc.);

Act.2.3: identify and take an inventory of water resources (surface and underground waters);

Act.2.4: study and map out ecogeographic and their hydro-climatic constraints;

Act.2.5: take an inventory of efficient SDR/SWC (Soil Defense and Restoration / Soil and Water Conservation) techniques.

Component 3: Study GGW Expected Social and Environmental Impacts (Act.3)

Act.3.1: take an inventory of natural resources (forest products, honey, milk, cheese and, arable soils, water resources, etc...), the social infrastructures of GGW coverage area;

Act.3.2: study all possibilities of income-generating activities offered by GGW;

Act.3.3: assess GGW environmental impacts

Component 4: Identify GGW Layout, Composition and Structure (Act.4)

The identification process will primarily focus on national component then sub-regional component. The countries concerned will consult on layout intersection at the borders.

Act.4.1: identify in relation to project objectives the best geographically referenced layout both for national and sub-regional components;

Act.4.2: take an inventory of and propose resilient vegetal and animal species adapted for use in GGW;

Act.4.3: identify new vegetal and animal species and mainstream them in production systems (forest fruits, fodder species, rabbit and duck rearing, etc) and conduct acceptability tests on these species;

Act.4.4: study relevant SDR/SWC activities and carry out introduction tests on new agro-sylvo-pastoral techniques: irrigation, herd management, cultural techniques, new energy sources, etc.

Act.4.5: determine the opportunities and constraints to GGW establishment and sustainable management, particularly through pioneering actions at the national level;

Act.4.6: analyze the context and administrative and institutional constraints in countries and borders crossed by GGW;

Act.4.7: have the National Coordinating Committee validate the elements of each National Component.

Component 5: The Actor Organizational Chart and the Coordinating and Communication Strategy have been defined (Act.5)

Act 5.1: identify GGW's SRCU (Sub-regional Coordinating Units) and NCU (National Coordinating Units) structure and missions;

Act 5.2: identify in each country local committees in the communities involved with GGW;

Act.5.2: study the organization and operation of GGW Pan African Agency (under the supervision of the Supreme Sahara Development Authority) and its relations with the sub-regional institutions related to the problems involved;

Act 5.3: draw up a communication strategy;

Component 6: Identify and Assess GGW Project Implementation Needs (Act.6²).

The purpose here is to study the needs (in terms of budgets, equipment and material, logistics, human resources etc...) for Project Document preparation phase and GGW implementation phase. The study primarily focuses on each country (NCU, National Component), then will be consolidated at the sub-regional level (SRCU, Sub-regional Component).

Act.6.1: identify for each Component (national and sub-regional), the needs in terms of material and logistics (field equipment and material, vehicles, materials and information, animation and sensitization materials), human resources and infrastructures;

Act.6.2: identify and evaluate operating expenses in each component (national and sub-regional);

Act.6.3: prepare an indicative overall budget for each of the sub-regional components.

Component 7: Preparation and Adoption of GGW Operational Documents

GGW Project Document will be prepared by having the two Documents relating to Sub-regional Components consolidated by an ad hoc committee made up of national and international experts. The final document will be validated and adopted during a ministerial conference;

Act 7.1: analyze, process and format collected data;

Act 7.2: have each country prepare a technical operation plan;

Act 7.3: have each sub-regional component prepare initial Project Document draft and organize a sub-regional validating workshop (SRCU country);

Act.7.4: finalize provisional project document and organize its adoption by member countries of the sub-regional component.

Component 8: Identify funding sources and mechanisms for financing GGW Implementation

Act.8. 1: identify funding sources, mechanisms and terms for resource mobilization,

Act.8.2: identify financial institutions and donor round table format for the financing of Regional GGW Establishment Project.

IV.8.5. – Reports and Validation Arrangements (specified when bid was being released)